LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 25

Responding Witness: Christopher M. Garrett

- Q.1-25. For each taxing authority to which aggregate property tax payments exceeding \$10,000 were made in 2016, please indicate whether there is a period of temporary abatement of taxes during the construction phase of assets to be placed in service. If so, please describe in detail.
- A.1-25. There is no period of temporary abatement of taxes during the construction phase of assets to be placed in service. Items in CWIP have historically been subject to property tax.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 26

Responding Witness: Christopher M. Garrett

- Q.1-26. Please provide a schedule showing how property taxes were computed for the base year and include copies of all workpapers used to determine the amount in electronic format with all formulas intact.
- A.1-26. See the attachment being provided in Excel format.

The attachment is being provided in a separate file in Excel format.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 27

Responding Witness: Christopher M. Garrett

- Q.1-27. Please provide a schedule showing how property taxes were computed for the test year and include copies of all workpapers used to determine the amount in electronic format with all formulas intact.
- A.1-27. See the response to Question No. 26.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 28

Responding Witness: Valerie L. Scott

- Q.1-28. Please provide a schedule of the amortization expense associated with each regulatory asset for (a) each year 2012 through 2016, (b) the base year and (c) the test year. Provide the balance of each regulatory asset at the beginning and end of each of those years, the amortization period that was used in each of those years, and the FERC accounts utilized to record the amortization expense. In addition, please source the amortization period to the Case No. in which the Commission approved the recovery and the amortization period, if any.
- A.1-28. See attached. Also see the response to PSC 1-8.

LOUISVILLE GAS AND ELECTRIC COMPANY Case No. 2016-00371 Amortization of Regulatory Assets

Account	Description	Account Used for Amortization	Amortization Period	Order No. / Docket No.
182320/182345	WINTER STORM 2009 - ELECTRIC	571/593	Aug-10 to Jul-20	KPSC 2009-00175 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
182342/182346	WINTER STORM 2009 - GAS	880	Aug-10 to Jul-20	KPSC 2009-00175 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
182321	MISO EXIT FEE	575.7	Mar-09 to Dec-14	KPSC 2003-00266 KPSC 2008-00252 KPSC 2012-00222 KPSC 2014-00372 FERC EC06-4-000 FERC EC06-4-001 FERC ER06-20-000 FERC ER06-20-001
182322/182335	RATE CASE EXPENSES - ELECTRIC	928	Jan-13 to Dec-15	KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372 307 U.S. at 120-121 294 U.S. at 73
	RATE CASE EXPENSES - GAS	928	Jan-13 to Dec-15	KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372 307 U.S. at 120-121 294 U.S. at 73
182332/182348	EKPC FERC TRANSMISSION COST - KY PORTION CARBON MANAGEMENT RESEARCH GROUP	456/566 930	Mar-09 to Feb-14 Aug-10 to Jul-20	FERC ER06-1458 KPSC 2008-00308 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
	KY CONSORTIUM FOR CARBON STORAGE	930.2	Aug-10 to Jul-14	KPSC 2008-00308 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
182334/182347	WIND STORM REGULATORY ASSET	593	Aug-10 to Jul-20	KPSC 2008-00456 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
182352	INTEREST RATE SWAPS (Mark to Market)	244	Varying from 2020 - 2033	KPSC 2003-00299 KPSC 2003-00433 KPSC 2008-00252 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
182359	GENERAL MANAGEMENT AUDIT - ELECTRIC	928	Jan-13 to Dec-15	KPSC 2012-00222
182360 182361	GENERAL MANAGEMENT AUDIT - GAS	928 503	Jan-13 to Dec-15 Jan-13 to Dec-17	KPSC 2012-00222 KPSC 2011-00380
	2011 SUMMER STORM - ELECTRIC	593		KPSC 2012-00222 KPSC 2014-00372
182364	FORWARD STARTING SWAP LOSSES	427	Sep-15 to Oct-25	KPSC 2014-00089
182344	SWAP TERMINATION (Wachovia)	930	Sep-15 to Oct-45 Aug-10 to Apr-35	KPSC 2014-00372 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
182381	SWAP TERMINATION (Bank of America)	427	Dec-16 to Oct 33	KPSC 2016-00393
182313	REG ASSET - PENSION GAIN-LOSS AMORTIZATION AMS REGULATORY ASSET (a)	926	Rolling 15 Years	KPSC 2014-00372

Attachment to Response to LGE KIUC-1 Question No. 28 2A of 16 Scott

	Amortization of Re	gulatory Assets	2012		
Account	Description	Beginning Balance	Annual Activity	Amortization	Ending Balance
182320/182345	WINTER STORM 2009 - ELECTRIC	37,484,019	-	(4,367,070)	33,116,949
182342/182346	WINTER STORM 2009 - GAS	143,933	-	(16,769)	127,165
182321	MISO EXIT FEE	759,633	-	(749,834)	9,798
182322/182335	RATE CASE EXPENSES - ELECTRIC	484,359	894,414	(321,124)	1,057,649
182323/182336	RATE CASE EXPENSES - GAS	267,390	284,806	(173,974)	378,222
	EKPC FERC TRANSMISSION COST - KY PORTION CARBON MANAGEMENT RESEARCH GROUP	367,407 154,470	- 97,560	(169,572) (97,560)	197,834 154,470
182333/182349	KY CONSORTIUM FOR CARBON STORAGE	567,068	-	(219,510)	347,558
182334/182347	WIND STORM REGULATORY ASSET	20,205,452	-	(2,354,033)	17,851,419
182352	INTEREST RATE SWAPS (Mark to Market)	59,566,464	(960,980)	-	58,605,484
182359 182360 182361	GENERAL MANAGEMENT AUDIT - ELECTRIC GENERAL MANAGEMENT AUDIT - GAS 2011 SUMMER STORM - ELECTRIC	90,545 29,486 8,052,125	1,038 338 -	- - -	91,583 29,824 8,052,125
182364	FORWARD STARTING SWAP LOSSES				-
182344	SWAP TERMINATION (Wachovia)	8,937,222	-	(258,476)	8,678,746
182381	SWAP TERMINATION (Bank of America)				
182313	REG ASSET - PENSION GAIN-LOSS AMORTIZATION AMS REGULATORY ASSET (a)	-	-	-	-

Attachment to Response to LGE KIUC-1 Question No. 28 3A of 16 Scott

	, ,	Amortization of Regulatory Assets		2013	
Account	Description	Beginning Balance	Annual Activity	Amortization	Ending Balance
182320/182345	WINTER STORM 2009 - ELECTRIC	33,116,949	-	(4,367,070)	28,749,879
182342/182346	WINTER STORM 2009 - GAS	127,165	-	(16,769)	110,396
182321	MISO EXIT FEE	9,798	(9,798)	-	-
182322/182335	RATE CASE EXPENSES - ELECTRIC	1,057,649	74	(461,373)	596,351
182323/182336	RATE CASE EXPENSES - GAS	378,222	24	(188,351)	189,895
	EKPC FERC TRANSMISSION COST - KY PORTI CARBON MANAGEMENT RESEARCH GROUP	ON 197,834 154,470	78,000	(169,572) (97,560)	28,262 134,910
182333/182349	KY CONSORTIUM FOR CARBON STORAGE	347,558	-	(219,510)	128,048
182334/182347	WIND STORM REGULATORY ASSET	17,851,419	-	(2,354,033)	15,497,386
182352	INTEREST RATE SWAPS (Mark to Market)	58,605,484	(22,692,563)	-	35,912,921
182359 182360 182361	GENERAL MANAGEMENT AUDIT - ELECTRIC GENERAL MANAGEMENT AUDIT - GAS 2011 SUMMER STORM - ELECTRIC	91,583 29,824 8,052,125		(30,528) (9,941) (1,610,425)	61,055 19,883 6,441,700
182364	FORWARD STARTING SWAP LOSSES	-			-
182344	SWAP TERMINATION (Wachovia)	8,678,746	-	(388,659)	8,290,087
182381	SWAP TERMINATION (Bank of America)	-			
182313	REG ASSET - PENSION GAIN-LOSS AMORTIZA AMS REGULATORY ASSET (a)	TION -	-	-	-

Attachment to Response to LGE KIUC-1 Question No. 28 4A of 16 Scott

		2014			
Account	Description	Beginning Balance	Annual Activity	Amortization	Ending Balance
182320/182345	WINTER STORM 2009 - ELECTRIC	28,749,879	-	(4,367,070)	24,382,809
182342/182346	WINTER STORM 2009 - GAS	110,396	-	(16,769)	93,627
182321	MISO EXIT FEE	-			-

182322/182335	RATE CASE EXPENSES - ELECTRIC	596,351	753,344	(298,138)	1,051,556
182323/182336	5 RATE CASE EXPENSES - GAS	189,895	188,336	(94,935)	283,296
	EKPC FERC TRANSMISSION COST - KY PORTION CARBON MANAGEMENT RESEARCH GROUP	28,262 134,910	78,000	(28,262) (58,440)	154,470
182333/182349	KY CONSORTIUM FOR CARBON STORAGE	128,048		(128,048)	-
182334/182347	WIND STORM REGULATORY ASSET	15,497,386		(2,354,033)	13,143,352
182352	INTEREST RATE SWAPS (Mark to Market)	35,912,921	12,075,907	-	47,988,828
182359	GENERAL MANAGEMENT AUDIT - ELECTRIC	61,055	-	(30,528)	30,527

182359	GENERAL MANAGEMENT AUDIT - ELECTRIC	61,055	-	(30,528)	30,527
182360	GENERAL MANAGEMENT AUDIT - GAS	19,883	-	(9,941)	9,941
182361	2011 SUMMER STORM - ELECTRIC	6,441,700	-	(1,610,425)	4,831,275
182364	FORWARD STARTING SWAP LOSSES	-	33,263,681	-	33,263,681
182344	SWAP TERMINATION (Wachovia)	8,290,087	-	(388,659)	7,901,428
182381	SWAP TERMINATION (Bank of America)	-			
102501	Swith TERRITOR (Bank of America)	-			
182313	REG ASSET - PENSION GAIN-LOSS AMORTIZATION	_	_	_	_
102313	AMS REGULATORY ASSET (a)		_	-	-
	AMB RECOEFFICIAL ASSEL (a)	_			

Attachment to Response to LGE KIUC-1 Question No. 28 5A of 16 Scott

		2015			
Account	Description	Beginning Balance	Annual Activity	Amortization	Ending Balance
182320/182345	WINTER STORM 2009 - ELECTRIC	24,382,809	-	(4,367,070)	20,015,738
182342/182346	5 WINTER STORM 2009 - GAS	93,627		(16,769)	76,858
182321	MISO EXIT FEE	-			-

182322/18233	5 RATE CASE EXPENSES - ELECTRIC	1,051,556	383,892	(487,738)	947,710
182323/18233	6 RATE CASE EXPENSES - GAS	283,296	95,967	(142,335)	236,928
	7 EKPC FERC TRANSMISSION COST - KY PORTION 8 CARBON MANAGEMENT RESEARCH GROUP	154,470	97,560	(97,560)	154,470
100000/10000/					
182333/18234	9 KY CONSORTIUM FOR CARBON STORAGE	-			-
182334/18234	7 WIND STORM REGULATORY ASSET	13,143,352		(2,354,033)	10,789,319
100050		15 000 000			17 1 15 0 5 1
182352	INTEREST RATE SWAPS (Mark to Market)	47,988,828	(843,464)	-	47,145,364
182359	GENERAL MANAGEMENT AUDIT - ELECTRIC	30,527	-	(30,527)	-
182360 182361	GENERAL MANAGEMENT AUDIT - GAS 2011 SUMMER STORM - ELECTRIC	9,941 4,831,275	-	(9,941) (1,610,425)	3,220,850
182364	FORWARD STARTING SWAP LOSSES	33,263,681	43,065,873	(33,263,681)	43,065,873
182344	SWAP TERMINATION (Wachovia)	7,901,428	-	(388,659)	7,512,769
182381	SWAP TERMINATION (Bank of America)	-			
182313	REG ASSET - PENSION GAIN-LOSS AMORTIZATION AMS REGULATORY ASSET (a)	-	5,747,780	-	5,747,780

Attachment to Response to LGE KIUC-1 Question No. 28 6A of 16 Scott

		2016			
Account	Description	Beginning Balance	Annual Activity	Amortization	Ending Balance
182320/182345	WINTER STORM 2009 - ELECTRIC	20,015,738	-	(4,367,070)	15,648,668
182342/182346	5 WINTER STORM 2009 - GAS	76,858		(16,769)	60,089
182321	MISO EXIT FEE	-			-

182322/182335	5 RATE CASE EXPENSES - ELECTRIC	947,710	1,370,908	(661,161)	1,657,457
182323/18233€	5 RATE CASE EXPENSES - GAS	236,928	393,876	(184,152)	446,652
	EKPC FERC TRANSMISSION COST - KY PORTION CARBON MANAGEMENT RESEARCH GROUP	154,470	97,560	(97,560)	- 154,470
182333/182349	9 KY CONSORTIUM FOR CARBON STORAGE	-			-
182334/182347	WIND STORM REGULATORY ASSET	10,789,319		(2,354,033)	8,435,286
182352	INTEREST RATE SWAPS (Mark to Market)	47,145,364	(16,180,347)	-	30,965,017

182359 182360 182361	GENERAL MANAGEMENT AUDIT - ELECTRIC GENERAL MANAGEMENT AUDIT - GAS 2011 SUMMER STORM - ELECTRIC	3,220,850	-	(1,610,425)	1,610,425
182364	FORWARD STARTING SWAP LOSSES	43,065,873		(2,397,988)	40,667,885
182344	SWAP TERMINATION (Wachovia)	7,512,769	-	(388,659)	7,124,110
182381	SWAP TERMINATION (Bank of America)	-	9,409,000		9,409,000
182313	REG ASSET - PENSION GAIN-LOSS AMORTIZATION AMS REGULATORY ASSET (a)	5,747,780	7,285,790	(2,148,328)	10,885,242

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Account	Description	Beginning Balance	Annual Activity	Ending Balance
182320/182345	5 WINTER STORM 2009 - ELECTRIC	19,288,000	(4,367,070)	14,920,930
182342/182346	5 WINTER STORM 2009 - GAS	74,000	(16,769)	57,231
182321	MISO EXIT FEE	-	-	-

182322/182335	5 RATE CASE EXPENSES - ELECTRIC	806,000	437,000	1,243,000
182323/182336	5 RATE CASE EXPENSES - GAS	300,000	158,000	458,000
	7 EKPC FERC TRANSMISSION COST - KY PORTION 3 CARBON MANAGEMENT RESEARCH GROUP	236,000	-	236,000
182333/182349	Y CONSORTIUM FOR CARBON STORAGE	-	-	-
182334/182347	7 WIND STORM REGULATORY ASSET	10,397,000	(2,354,000)	8,043,000
182352	INTEREST RATE SWAPS (Mark to Market)	41,687,752	(2,972,726)	38,715,026
182359 182360 182361	GENERAL MANAGEMENT AUDIT - ELECTRIC GENERAL MANAGEMENT AUDIT - GAS 2011 SUMMER STORM - ELECTRIC	2,952,000	(1,610,000)	1,342,000

182364	FORWARD STARTING SWAP LOSSES	42,673,000	(2,392,000)	40,281,000
182344	SWAP TERMINATION (Wachovia)	7,448,000	(389,000)	7,059,000
182381	SWAP TERMINATION (Bank of America)	13,068,248	(191,274)	12,876,974
182313	REG ASSET - PENSION GAIN-LOSS AMORTIZATION AMS REGULATORY ASSET (a)	5,748,000	5,430,000	11,178,000

LOUISVILLE GAS AND ELECTRIC COMPANY Case No. 2016-00371 Amortization of Regulatory Assets

	u u u u u u u u u u u u u u u u u u u	Forecast Test Period (7/17 - 6/18)			
Account	Description	Beginning Balance	Annual Activity	Ending Balance	
182320/182345	WINTER STORM 2009 - ELECTRIC	13,463,000	(4,367,070)	9,095,930	
182342/182346	WINTER STORM 2009 - GAS	54,000	(16,769)	37,231	
182321	MISO EXIT FEE	-	-	-	

182322/182335	RATE CASE EXPENSES - ELECTRIC	1,314,000	(636,000)	678,000
182323/182336	RATE CASE EXPENSES - GAS	488,000	(238,000)	250,000
	EKPC FERC TRANSMISSION COST - KY PORTION CARBON MANAGEMENT RESEARCH GROUP	203,000	- -	203,000
182333/182349	KY CONSORTIUM FOR CARBON STORAGE	-	-	-
182334/182347	WIND STORM REGULATORY ASSET	7,258,000	(2,354,000)	4,904,000
182352	INTEREST RATE SWAPS (Mark to Market)	36,597,308	(6,271,279)	30,326,029
182359 182360 182361	GENERAL MANAGEMENT AUDIT - ELECTRIC GENERAL MANAGEMENT AUDIT - GAS 2011 SUMMER STORM - ELECTRIC	805,000	(805,000)	- - -
		20,402,000		

182364	FORWARD STARTING SWAP LOSSES	39,482,000	(2,391,000)	37,091,000
182344	SWAP TERMINATION (Wachovia)	6,930,000	(389,000)	6,541,000
182381	SWAP TERMINATION (Bank of America)	12,617,692	(775,721)	11,841,971
182313	REG ASSET - PENSION GAIN-LOSS AMORTIZATION AMS REGULATORY ASSET (a)	17,787,000	11,220,000 5,249,000	29,007,000 5,249,000

Attachment to Response to LGE KIUC-1 Question No. 28 1B of 16 Scott

LOUISVILLE GAS AND ELECTRIC COMPANY Case No. 2016-00371 Amortization of Regulatory Assets

Account	Description	Account Used for Amortization	Amortization Period	Order No. / Docket No.
182305/182315	ASC 715 - PENSION AND POSTRETIREMENT	926	Ongoing	KPSC 2003-00433 KPSC 2008-00252 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372 FERC AI04-2-000 FERC AI07-1-000
182328-182331	ASC 740 - INCOME TAXES	282/283	Ongoing	KPSC 2005-00180 KPSC 2005-00180 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
182317-18/182	3 ASSET RETIREMENT OBLIGATION - ELECTRIC	407	Ongoing	KPSC 2003-00426 KPSC 2003-00433 KPSC 2008-00252 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372 FERC FA 12-12-000 FERC ER08-1588-000
182326	ASSET RETIREMENT OBLIGATION - GAS	407	Ongoing	KPSC 2003-00426 KPSC 2003-00426 KPSC 2003-00433 KPSC 2008-00252 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372 FERC FA 12-12-000 FERC ER08-1588-000
182327	ASSET RETIREMENT OBLIGATION - COMMON	407	Ongoing	KPSC 2003-00426 KPSC 2003-00433 KPSC 2008-00252 KPSC 2009-00549 KPSC 2012-00222 KPSC 2012-00222 FERC FA 12-12-000 FERC ER08-1588-000
182372-182373	ARO - GENERATION - COAL COMBUSTION RESIDUALS (b)	407	Jul-16 to Jun-26 Jul-16 to Jun-41	KPSC 2003-00426 KPSC 2003-00433 KPSC 2008-00252 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372 FERC FA 12-12-000 FERC ER08-1588-000 KPSC 2016-00027 FERC ER17-234-000
182307	ENVIRONMENTAL COST RECOVERY	440-445	Ongoing	KRS 278.183
182306 182340	FUEL ADJUSTMENT CLAUSE PERFORMANCE-BASED RATES	803 803	Ongoing Ongoing	807 KAR 5:056 KPSC 1997-00171 KPSC 2005-00031 KPSC 2009-00550 KPSC 2012-00222 KPSC 2014-00372
182308	GAS SUPPLY CLAUSE	803	Ongoing	KPSC 9133 KPSC 2003-00433 KPSC 2008-00252 KPSC 2009-00549 KPSC 2012-00222 KPSC 2014-00372
182363 182365	DSM COST RECOVERY - UNDER-RECOVERY GAS LINE TRACKER	440-445, 480-482, 480-482	Ongoing Ongoing	KRS 278.285 KPSC 2012-00222
182370	OFF-SYSTEM TRACKER	440-445	Ongoing	KPSC 2014-00372 KPSC 2014-00371
LG&E Regulat	tory Assets Total			

 LG&E Regulatory Assets Total

 a) Business Plan assumed a regulatory asset would be recorded as retirements of meters occurred. Since then the Company determined it should establish a regulatory
 b) ARO CCR detail is not available from the Business Plan in UI Planner - detail is combined in the ARO line item

* These balances are a result of netting the regulatory asset and the regulatory liability in the forecast - the net balance was a regulatory liability

	Ca	GAS AND ELECTRIC COMPANY se No. 2016-00371 tion of Regulatory Assets	Attachment to	-	IUC-1 Question No. 28 2B of 16 Scott
Account	Description	Beginning Balance	Annual Activity	Amortization	Ending Balance
	ASC 715 - PENSION AND POSTRETIREMENT	225,305,162	31,200,453	(24,799,966)	231,705,649
182328-182331	ASC 740 - INCOME TAXES	14,730,134	118,389	(525,940)	14,322,583
182317-18/1823	3 ASSET RETIREMENT OBLIGATION - ELECTRIC	9,423,533	3,699,843	(113,009)	13,010,367
182326	ASSET RETIREMENT OBLIGATION - GAS	1,233,920	2,410,208	(1,646,097)	1,998,031
182327	ASSET RETIREMENT OBLIGATION - COMMON	9,107	8,585	(465)	17,227
182372-182373	ARO - GENERATION - COAL COMBUSTION RESIDUA	ALS (b) -	-	-	-
182307 182306 182340	ENVIRONMENTAL COST RECOVERY FUEL ADJUSTMENT CLAUSE PERFORMANCE-BASED RATES	3,598,000 4,018,092	1,055,680 7,641,000 4,262,010	(424,145) (5,171,000) (2,640,217)	631,535 6,068,000 5,639,885
182308	GAS SUPPLY CLAUSE	1,683,380	7,546,298	(3,790,439)	5,439,239
182363 182365	DSM COST RECOVERY - UNDER-RECOVERY GAS LINE TRACKER	-	1,538,143	(607,258)	930,885 -
182370 LG&E Regulat	OFF-SYSTEM TRACKER	397,110,901	- 59,797,784	- (48,446,460)	408,462,226

a) Business Plan assumed a regulatory asset would be recorded as retirements of meters occasset at the end of the meter replacement program. There is b) ARO CCR detail is not available from the Business Plan in UI Planner - detail is combined by the second seco

	C	GAS AND ELECTRIC COMPAN ase No. 2016-00371 ation of Regulatory Assets	ΙΥ Attachme	ent to Response to LG	GE KIUC-1 Question No. 28 3B of 16 Scott	
		0 1		2013		
Account	Description	Beginning Balance	Annual Activity	Amortization	Ending Balance	
182305/182315	5 ASC 715 - PENSION AND POSTRETIREMENT	231,705,649	23,775,059	(91,392,827)	164,087,881	
182328-182331	ASC 740 - INCOME TAXES	14,322,583	166,627	(431,860)	14,057,350	
182317-18/182	3 ASSET RETIREMENT OBLIGATION - ELECTRIC	13,010,367	6,705,785	(1,685,805)	18,030,347	
182326	ASSET RETIREMENT OBLIGATION - GAS	1,998,031	1,903,745	(996,849)	2,904,927	
182327	ASSET RETIREMENT OBLIGATION - COMMON	17,227	8,277	(506)	24,998	
182372-182373	3 ARO - GENERATION - COAL COMBUSTION RESIDUA	LS (b) -	-	-	-	
182307 182306 182340	ENVIRONMENTAL COST RECOVERY FUEL ADJUSTMENT CLAUSE PERFORMANCE-BASED RATES	631,535 6,068,000 5,639,885	2,318,727 9,635,000 1,556,141	(789,551) (14,011,000) (4,621,995)	2,160,711 1,692,000 2,574,031	
182308	GAS SUPPLY CLAUSE	5,439,239	11,936,838	(10,016,432)	7,359,645	
182363	DSM COST RECOVERY - UNDER-RECOVERY GAS LINE TRACKER	930,885	7,491,371	(4,818,123)	3,604,133	
182365	OND LIVE TRACKER					

a) Business Plan assumed a regulatory asset would be recorded as retirements of meters occ b) ARO CCR detail is not available from the Business Plan in UI Planner - detail is combine

		VILLE GAS AND ELECTRIC COMPANY Case No. 2016-00371 mortization of Regulatory Assets	Attachment to	-	IUC-1 Question No. 28 4B of 16 Scott
Assount	Description	Beginning Balance	Annual Activity	+ Amortization	Ending Balance
Account	Description		-		
182305/182315	ASC 715 - PENSION AND POSTRETIREMENT	164,087,881	64,338,355	(13,887,774)	214,538,462
182328-182331	ASC 740 - INCOME TAXES	14,057,350	14,319	(279,552)	13,792,117
182317-18/1823	3 ASSET RETIREMENT OBLIGATION - ELECTRIC	18,030,347	6,941,551	(114,037)	24,857,861
182326	ASSET RETIREMENT OBLIGATION - GAS	2,904,927	2,020,595	(1,536,648)	3,388,874
182327	ASSET RETIREMENT OBLIGATION - COMMON	24,998	104,517	(129,515)	-
182372-182373	ARO - GENERATION - COAL COMBUSTION RES	IDUALS (b) -	-	-	-
182307 182306 182340	ENVIRONMENTAL COST RECOVERY FUEL ADJUSTMENT CLAUSE PERFORMANCE-BASED RATES	2,160,711 1,692,000 2,574,031	4,839,904 4,681,000 2,516,477	(3,160,615) (4,811,000) (3,379,290)	3,840,000 1,562,000 1,711,218
182308	GAS SUPPLY CLAUSE	7,359,645	25,465,387	(19,030,055)	13,794,977
182363 182365	DSM COST RECOVERY - UNDER-RECOVERY GAS LINE TRACKER	3,604,133	4,067,619 -	(7,671,752)	-

b) ARO CCR detail is not available from the Business Plan in UI Planner - detail is combine

	LOUISVILLE GAS AND ELECTRIC COMPANY Case No. 2016-00371 Amortization of Regulatory Assets			CIUC-1 Question No. 28 5B of 16 Scott
		201	5	
Account Description	Beginning Balance	Annual Activity	Amortization	Ending Balance
182305/182315 ASC 715 - PENSION AND POSTRETIREM	MENT 214,538,462	31,966,740	(37,548,834)	208,956,368
182328-182331 ASC 740 - INCOME TAXES	13,792,117	14,319	(279,552)	13,526,884
182317-18/1823 ASSET RETIREMENT OBLIGATION - EL	ECTRIC 24,857,861	29,252,876	(740,182)	53,370,555
182326 ASSET RETIREMENT OBLIGATION - GA	AS 3,388,874	1,947,945	(1,713,247)	3,623,572
182327 ASSET RETIREMENT OBLIGATION - CC	OMMON -	-	-	-
182372-182373 ARO - GENERATION - COAL COMBUST	ION RESIDUALS (b) -	-	-	-
 182307 ENVIRONMENTAL COST RECOVERY 182306 FUEL ADJUSTMENT CLAUSE 182340 PERFORMANCE-BASED RATES 	3,840,000 1,562,000 1,711,218	10,486,000 2,088,000 1,218,784	(1,020,000) (3,650,000) (1,500,798)	13,306,000 1,429,204
182308 GAS SUPPLY CLAUSE	13,794,977	2,074,932	(15,869,909)	-

182363 182365	DSM COST RECOVERY - UNDER-RECOVERY GAS LINE TRACKER	-	1,286,856	-	1,286,856
182370	OFF-SYSTEM TRACKER	-	-	-	-
LG&E Regula	atory Assets Total	410,620,299	128,884,060	(105,091,261)	434,413,098

a) Business Plan assumed a regulatory asset would be recorded as retirements of meters occ

b) ARO CCR detail is not available from the Business Plan in UI Planner - detail is combine

		ILLE GAS AND ELECTRIC COMPANY Case No. 2016-00371 ortization of Regulatory Assets			KIUC-1 Question No. 28 6B of 16 Scott
			201	6	
Account	Description	Beginning Balance	Annual Activity	Amortization	Ending Balance
182305/182315	ASC 715 - PENSION AND POSTRETIREMENT	208,956,368	(1,545,009)	3,550,620	210,961,979
182328-182331	ASC 740 - INCOME TAXES	13,526,884	1,023,098	(374,698)	14,175,284
182317-18/1823	3 ASSET RETIREMENT OBLIGATION - ELECTRIC	53,370,555	21,076,596	(38,578,975)	35,868,177
182326	ASSET RETIREMENT OBLIGATION - GAS	3,623,572	1,804,569	(2,054,147)	3,373,993
182327	ASSET RETIREMENT OBLIGATION - COMMON	-	-	-	-
182372-182373	ARO - GENERATION - COAL COMBUSTION RES	DUALS (b) -	31,064,241	(95,997)	30,968,244
182307 182306 182340	ENVIRONMENTAL COST RECOVERY FUEL ADJUSTMENT CLAUSE PERFORMANCE-BASED RATES	13,306,000 - 1,429,204	6,865,000 107,000	(13,737,000) (1,536,204)	6,434,000 - -
182308	GAS SUPPLY CLAUSE	-	9,920,809	(7,104,687)	2,816,121
182363 182365	DSM COST RECOVERY - UNDER-RECOVERY GAS LINE TRACKER	1,286,856	396,585	(1,683,441)	-

a) Business Plan assumed a regulatory asset would be recorded as retirements of meters occ

b) ARO CCR detail is not available from the Business Plan in UI Planner - detail is combine

Attachment to Response to LGE KIUC-1 Question No. 28 7B of 16 Scott

Amortization of Regulatory Assets

	Amortization of Regulatory Assets Forecast Base Period (3/16 - 2/17)			/17)
Account	Description	Beginning Balance	Annual Activity	Ending Balance
182305/182315	5 ASC 715 - PENSION AND POSTRETIREMENT	208,707,000	56,174,000	264,881,000
182328-182331	ASC 740 - INCOME TAXES	22,393,000	(22,393,000)	-
182317-18/182	3 ASSET RETIREMENT OBLIGATION - ELECTRIC	55,672,000	23,524,000	79,196,000
182326	ASSET RETIREMENT OBLIGATION - GAS	5,800,000	2,374,000	8,174,000
182327	ASSET RETIREMENT OBLIGATION - COMMON	-	-	-

182372-182373 ARO - GENERATION - COAL COMBUSTION RESIDUALS (b)

182307 182306 182340	ENVIRONMENTAL COST RECOVERY FUEL ADJUSTMENT CLAUSE PERFORMANCE-BASED RATES	7,525,000 - 981,000	(2,096,836) - (981,000)	5,428,164 - -
182308	GAS SUPPLY CLAUSE	(2,495,738)	3,574,212	1,078,474
100060	DOM COST DECOVERY INDER DECOVERY			
182363 182365	DSM COST RECOVERY - UNDER-RECOVERY GAS LINE TRACKER	- 1,464,570	- (1,524,660)	- (60,090)
102505		1,404,570	(1,524,000)	(00,070)
182370	OFF-SYSTEM TRACKER	(114,000)	(120,000)	(234,000)
LG&E Regu	latory Assets Total	444,610,832	50,262,877	494,873,709

a) Business Plan assumed a regulatory asset would be recorded as retirements of meters occ

b) ARO CCR detail is not available from the Business Plan in UI Planner - detail is combined

Attachment to Response to LGE KIUC-1 Question No. 28 8B of 16 Scott

	Amortization of Regulatory Assets			
	Forecast Test Period (7/17 - 6/18)			18)
Account	Description	Beginning Balance	Annual Activity	Ending Balance
182305/182315	ASC 715 - PENSION AND POSTRETIREMENT	240,642,000	(15,349,000)	225,293,000
182328-182331	ASC 740 - INCOME TAXES	21,613,000	(21,613,000)	-
182317-18/1823	3 ASSET RETIREMENT OBLIGATION - ELECTRIC	84,205,000	18,964,000	103,169,000
182326	ASSET RETIREMENT OBLIGATION - GAS	8,700,000	2,018,000	10,718,000
182327	ASSET RETIREMENT OBLIGATION - COMMON	-	-	-

182372-182373 ARO - GENERATION - COAL COMBUSTION RESIDUALS (b)

182307	ENVIRONMENTAL COST RECOVERY	5,336,518	4,406,402	9,742,920
182306	FUEL ADJUSTMENT CLAUSE	-	-	-
182340	PERFORMANCE-BASED RATES	-	-	-
182308	GAS SUPPLY CLAUSE	718,983	(718,983)	-
182363 182365	DSM COST RECOVERY - UNDER-RECOVERY GAS LINE TRACKER	-	-	- _ *
182370	OFF-SYSTEM TRACKER	(70,000)	(39,000)	(109,000) *
LG&E Regu	Ilatory Assets Total	498,144,501	(14,106,420)	484,038,081

a) Business Plan assumed a regulatory asset would be recorded as retirements of meters occ

b) ARO CCR detail is not available from the Business Plan in UI Planner - detail is combine

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 29

Responding Witness: Daniel K. Arbough

- Q.1-29. Please provide the Company's 2015, 2016, and 2017 pension and OPEB actuarial reports as well as the actuarial cost projections for the base year and the test year in a comparable format. Please identify all changes in assumptions, including mortality tables used in these actuarial reports compared to the actuarial reports relied on in the prior rate case.
- A.1-29. The Company's 2015 and 2016 pension actuarial reports and the actuarial cost projections for 2017 and 2018 which are included in the base year and the test year are provided in Attachment #1. The Company's 2015 and 2016 OPEB actuarial reports and the actuarial cost projections for 2017 and 2018 which are included in the base year and the test year are provided in Attachment #2. The Company anticipates receiving the 2017 pension actuarial report in the second quarter of 2017.

All changes in significant assumptions, including mortality tables, used in these actuarial reports compared to the actuarial reports relied on in the prior rate case are summarized in Attachment #3.



Attachment #1 to Response to KIUC-1 Question No. 29

Page 1 of 27 Arbough

April 15, 2015

Ms. Kelli Higdon Senior Accounting Analyst LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202

Dear Kelli:

2015 ASC 715 ACCOUNTING RESULTS FOR QUALIFIED PENSION PLANS

LG&E and KU Energy LLC ("LKE" or "the Company") engaged Towers Watson Delaware, Inc. ("Towers Watson") to determine the Net Periodic Pension Cost/Income ("NPPC") for its qualified pension plans, in accordance with FASB Accounting Standards Codification Topic 715 ("ASC 715") for the fiscal year beginning January 1, 2015. The exhibits that follow provide results on a plan by plan basis, with allocations as requested by LKE.

The benefit obligations were measured as of LKE's fiscal year begin date of January 1, 2015, and are based on January 1, 2015 census data collected from the plan administrator for the following valuations:

- LG&E and KU Retirement Plan
- Louisville Gas and Electric Company Bargaining Employees' Retirement Plan

We have reviewed the census information for reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

Reconciliation to May 30, 2014 Budget Projections

The preliminary 2015 consolidated U.S. GAAP NPPC for the three pension plans of \$44.8 million compares to the <u>projected 2015</u> consolidated expense of \$49.1 million provided in our May 30, 2014 e-mail as follows:

	Consolidated U.S. GAAP
	NPPC (in \$millions)
2015 Projected NPPC provided on May 30, 2014	\$49.1
Economic gains due to higher than expected 2014 asset returns	(6.4)
and earlier than expected contribution timing during 2015	(0.1)
Reflection of updated data compared to roll-forward	(0.2)
Impact of assumption changes other than discount rate and	(2.0)
mortality	(2:0)
Updated discount rate at December 31, 2014	4.7
Updated mortality assumption at December 31, 2014	(4.2)
Reflection of final plan changes, including early retirement factor	3.8
improvements and Bargaining plan multiplier increase	5.6
2015 Preliminary NPPC	\$44.8



Reconciliation to Actual 2014 Expense

The preliminary 2015 consolidated U.S. GAAP NPPC for the three pension plans of \$44.8 million compares to the <u>actual 2014</u> consolidated NPPC of \$17.9 million as follows:

	Consolidated U.S. GAAP
	NPPC (in \$millions)
2014 Actual U.S. GAAP NPPC	\$17.9
Economic gains due to higher than expected asset returns	(5.5)
Demographic gains due to updated data	(0.6)
Impact of assumption changes other than discount rate and	(2.0)
mortality	(2.0)
Discount rate change	11.3
Mortality assumption change	18.2
Full effect of plan changes, including Early retirement factor	5.5
improvements and Bargaining plan multiplier increase	5.5
2015 Preliminary U.S. GAAP NPPC	\$44.8

Please note the following regarding these results:

1. As of January 1, 2015, LG&E and KU Energy LLC has selected the following economic assumptions: Discount rate:

	January 1, 2015
LG&E and KU Retirement Plan	4.27%
Louisville Gas and Electric Company Bargaining Employees' Retirement Plan	4.20%

All discount rates are based on the results of the Towers Watson BOND:Link model. At December 31, 2014, cash flows by plan were used to develop individual plan discount rates. Further information regarding the BOND:Link model parameters chosen by LKE can be found in our e-mail correspondence from January 7, 2015.

Rate of compensation increase:

The January 1, 2015 rate of compensation increase assumption for all LKE plans is a flat 3.50% at all ages. This amount decreased from the flat 4.00% assumption as of January 1, 2014 based on long-term expectations of salary increase rates for the covered plan populations.

Expected return on assets (EROA):

	January 1, 2015
LG&E and KU Retirement Plan	7.00%
Louisville Gas and Electric Company Bargaining Employees' Retirement Plan	7.00%



2. During 2014, LKE completed a demographic experience study to assess the appropriateness of the plans' current demographic assumptions. Details regarding the results of the study can be found in our 2014 Experience Study and Demographic Assumptions Review presentation provided to PPL and LKE on November 12, 2014. As a result of that study, the following demographic assumptions were refined to better reflect anticipated future demographic experience. All remaining demographic assumptions remain consistent with those selected by LKE at January 1, 2014. Detailed descriptions of all demographic assumptions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2015 (to be published during the coming months).

Age	January 1, 2015	January 1, 2014
55	3%	2%
56	3%	2%
57	4%	2%
58	5%	4%
59	10%	4%
60	20%	10%
61	20%	10%
62	35%	50%
63	25%	15%
64	25%	10%
65 - 67	50%	100%
68+	100%	100%

Retirement rates for active participants:

Retirement age for deferred vested participants:

	January 1, 2015	January 1, 2014
LG&E hired before 2003/2004	60	65
ERF improvement		
LG&E hired after 2003/2004	58	55
ERF improvement		

Termination:

For both the union and non-union populations, the termination assumption was updated to the SOA Hourly Union Termination Table.

Form of payment:

75% of future LG&E bargained and non-bargained retirees are now assumed to elect a 50% J&S form of payment and 25% are assumed to elect a single life annuity.



Mortality:

For the non-bargained plans, the mortality assumption was updated to reflect the RP-2014 gender specific healthy employee and healthy annuitant mortality tables with white collar adjustment (removing MP-2014 improvement projections from 2006-2014), increased by 2%, and applying Scale BB 2-Dimensional mortality improvements from 2006 on a generational basis.

For bargained plans, the mortality assumption was updated to reflect the RP-2014 gender specific healthy employee and healthy annuitant mortality tables with blue collar adjustment (removing MP-2014 improvement projections from 2006-2014), increased by 7%, and applying Scale BB 2-Dimensional mortality improvements from 2006 on a generational basis.

The disabled mortality assumption was updated to reflect the RP-2014 "Disabled Retirees" table (removing MP-2014 improvement projections from 2006-2014) and applying Scale BB 2-Dimensional mortality improvements from 2006 on a generational basis.

3. All plan provisions are the same as those valued at January 1, 2014, with the following exceptions:

LG&E Bargaining Plan	 Early retirement factors improved by two years for participants who retire after attaining early retirement eligibility Flat dollar pension multiplier improvement reflected in the 2014 Collective Bargaining Agreement between LG&E and IBEW Local 2100
LG&E and KU Retirement Plan	Early retirement factors improved by two years for participants who retire after attaining early retirement eligibility

Detailed descriptions of the plan provisions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2015 (to be published during the coming months).

The retirement assumption was modified to reflect anticipated experience under the new plan provisions, the impact of which was included in the prior service cost bases established for the above changes in early retirement factors.

4. The following contributions made on January 14, 2015 for the LG&E and KU Retirement Plan and the Louisville Gas and Electric Company Bargaining Employees' Retirement Plan,

were reflected

in the development of the expected return on plan assets:

	Contribution (in \$millions)
LG&E and KU Retirement Plan	
LG&E non-union	\$7.7
Louisville Gas and Electric Company	\$13.4
Bargaining Employees' Retirement Plan	φ13.4



Actuarial Certification

In preparing the results presented in this letter (including attached exhibits), we have relied upon information regarding plan provisions, participants, assets and sponsor accounting policies and methods provided by LKE and other persons or organizations designated by LKE. We have relied on all the data and information provided as complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by LKE, may produce materially different results that could require that a revised report be issued.

The measurement date is January 1, 2015. The benefit obligations were measured as of January 1, 2015 and are based on participant data as of the census date, January 1, 2015.

Information about the fair value of plan assets was furnished to us by BNY Mellon. LKE also provided information about the general ledger account balances for the pension plan costs at December 31, 2014, which reflect the expected funded status of the plans before adjustment to reflect the plans' funded status based on the year-end measurements. Towers Watson used information supplied by LKE regarding amounts recognized in accumulated other comprehensive income as of December 31, 2014. This data was reviewed for reasonableness and consistency, but no audit was performed.

As required by U.S. GAAP, the actuarial assumptions and the accounting policies and methods employed in the development of the pension cost and other financial reporting have been selected by LKE. Towers Watson has concurred with these assumptions and methods. U.S. GAAP requires that each significant assumption "individually represent the best estimate of a particular future event."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. The numbers shown in this report are not rounded, but this is for convenience and should not imply precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs reported in this valuation will likely increase in future valuations (and vice versa). Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from the anticipated by the economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the end of an amortization period), and changes in plan provisions or applicable law.

The information contained in this report was prepared for the internal use of LKE and its auditors in connection with our actuarial valuations of the qualified pension plans. It is neither intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. LKE may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require



LKE to provide them this report, in which case LKE will use best efforts to notify Towers Watson in advance of this distribution. Further distribution to, or use by, other parties of all or part of this document is expressly prohibited without Towers Watson's prior written consent. Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to pension plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Towers Watson Delaware Inc.

* * * * *

Please do not hesitate to call if you have any questions.

Sincerely,

errefu a. Della litto

Jennifer A. Della Pietra, ASA, EA

Senior Consulting Actuary Direct Dial: 215-246-6861

Ray los

Royce S. Kosoff, FSA, EA, CFA

Senior Consulting Actuary Direct Dial: 215-246-6815

William Lot

William R. Loth, FSA, EA Consulting Actuary Direct Dial: 215-246-6647

cc: George Sunder – PPL Corporation Dan Arbough – LG&E and KU Energy LLC Jeanne Kugler – LG&E and KU Energy LLC Karla Durn – PPL Corporation Kristin May, FSA, EA – Towers Watson

Attachment #1 to Response to KIUC-1 Question No. 29 Page 7 of 27 Arbough

LG&E and KU Energy LLC ("LKE") 2015 Net Periodic Pension Cost Qualified Pension Plans

	Regulatory	Regulatory		Regulatory
			Non-Union Retirement Plan	Non-Union
	LG&E Union	LG&E		ServCo
Funded Status ABO	331,649,737	216,073,596		
PBO Fair value of assets Funded status	331,649,737 300,546,993 (31,102,744)	243,058,032 213,348,099 (29,709,933)		
Amounts recognized in accumulated other comprehensive income consist of:				
Net actuarial loss/(gain) Prior service cost/(credit) Transition obligation/(asset)	99,269,492 22,160,037	76,347,804 5,262,940		
Total	121,429,529	81,610,744		
Market related value of assets	285,369,049	204,154,232		
2015 Net Periodic Pension Cost				
Service cost	1,431,466	2,167,471		13,767,439
Interest cost Expected return on assets Amortization of:	13,618,634 (20,362,203)	10,142,890 (14,423,958)		21,704,049 (26,386,798)
Transition obligation (asset)	-	-		-
Prior service cost (credit)	3,166,370	1,824,525		3,520,645
Actuarial (gain) loss Net periodic pension cost	<u>11,451,092</u> 9,305,359	8,224,043 7,934,971		<u>11,031,014</u> 23,636,349
Key assumptions: Discount rate Expected return on plan assets Rate of compensation increase	4.20% 7.00% N/A	4.27% 7.00% 3.50%		4.27% 7.00% 3.50%

The results contained in this document are based on the data provided by LKE's outside administrator as of January 1, 2015. All other assumptions, methods, and plan provisions are the same as those used for the year-end 2014 financial statement fisclosures provided on January 20, 2015,

The descriptions of the assumptions, methods, plan provisions, and limitations as set forth in the year-end 2014 financial statement disclosure letter should be considered part of these results.

Attachment #1 to Response to KIUC-1 Question No. 29 Page 8 of 27 Arbough

LG&E and KU Energy LLC ("LKE")

2015 Net Periodic Pension Cost Reflecting 15-year (Gain)/Loss Amortization Method Qualified Pension Plans

	Reg-15	Reg-15	Reg-15	
		Non-Union Retirement Plan		
	LG&E Union	LG&E	ServCo (Regulatory)	
Funded Status ABO	331,649,737	216,073,596		
PBO	331,649,737	243,058,032		
Fair value of assets	300,546,993	213,348,099		
Funded status	(31,102,744)	(29,709,933)		
Amounts recognized in accumulated other comprehensive income consist of:				
Net actuarial loss/(gain)	99,269,492	76,347,804		
Prior service cost/(credit)	22,160,037	5,262,940		
Transition obligation/(asset)	-	-		
Total	121,429,529	81,610,744		
Market related value of assets	285,369,049	204,154,232		
2015 Net Periodic Pension Cost				
Service cost	1,431,466	2,167,471	13,767,439	
Interest cost	13,618,634	10,142,890	21,704,049	
Expected return on assets	(20,362,203)	(14,423,958)	(26,386,798)	
Amortization of:				
Transition obligation (asset)	-	-	-	
Prior service cost (credit)	3,166,370	1,824,525	3,520,645	
Actuarial (gain) loss	8,244,110	6,016,150	8,633,975	
Net periodic pension cost	6,098,377	5,727,078	21,239,310	
Gain/Loss Amortization Detail				
Net actuarial loss/(gain) at 1/1/2015	99,269,492	76,347,804	130,306,103	
6 months of amortization using "Double Corridor" method	5,725,546	4,112,022	5,515,507	
Net actuarial loss/(gain) at 7/1/2015	93,543,946	72,235,782	124,790,596	
6 months of amortization using 15-year "Vintage" method	2,518,564	1,904,128	3,118,468	
Key assumptions:				
Discount rate	4.20%	4.27%	4.27%	
Expected return on plan assets	7.00%	7.00%	7.00%	
Rate of compensation increase	N/A	3.50%	3.50%	

The results contained in this document are based on the data provided by LKE's outside administrator as of January 1, 2015. All other assumptions, methods, and plan provisions are the same as those used for the year-end 2014 financial statement fisclosures provided on January 20, 2015, with the exception of the gain/loss amortization method, which is based on the double corridor method for the first half of the year and based on a 15-year amortization of the 7/1/2015 unrecognized loss/(gain) with a single 10% corridor for the second half of the year. Per discussions with LKE, the plans were not remeasured as of 7/1/2015. The descriptions of the assumptions, methods, plan provisions, and limitations as set forth in the year-end 2014 financial statement disclosure letter should be considered part of these results.

May 2, 2016

Ms. Jeanne Kugler Manager, Risk Management LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202

Dear Jeanne:

2016 ASC 715 ACCOUNTING RESULTS FOR QUALIFIED PENSION PLANS

LG&E and KU Energy LLC ("LKE" or "the Company") engaged Towers Watson Delaware, Inc. ("Willis Towers Watson") to determine the Net Periodic Pension Cost/Income ("NPPC") for its qualified pension plans, in accordance with FASB Accounting Standards Codification Topic 715 ("ASC 715") for the fiscal year beginning January 1, 2016. The exhibits that follow provide results on a plan by plan basis, with allocations as requested by LKE.

The benefit obligations were measured as of LKE's fiscal year begin date of January 1, 2016, and are based on January 1, 2016 census data collected from the plan administrator for the following valuations:

- LG&E and KU Retirement Plan
- Louisville Gas and Electric Company Bargaining Employees' Retirement Plan

We have reviewed the census information for reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

Reconciliation to September 2, 2015 Budget Projections (Reflecting 15-year Amortization Method)

The preliminary 2016 NPPC for the two pension plans of \$26.3 million based on the Regulatory 15-year amortization method compares to the <u>projected 2016</u> expense of \$26.8 million based on the Regulatory 15-year amortization method provided in our September 2, 2015 e-mail as follows:

	Consolidated NPPC (in \$millions)
2016 Projected NPPC provided on September 2, 2015	\$26.8
Actual 2015 return (vs. expected return in budget), 7.00%	
expected return on assets assumption (compared to 6.75% in	(5.8)
budget), and actual contribution timing	
Reflection of updated data compared to roll-forward	(0.5)
Updated discount rate at December 31, 2015	(0.9)
Reflection of December 31, 2015 lump sum mortality assumption (budget reflected preliminary assumption set prior to November meeting with LKE/PPL)	6.7
2016 Preliminary NPPC	\$26.3

* Excludes WKE Non-Union results

Reconciliation to Actual 2015 Expense (Reflecting 15-year Amortization Method)

The preliminary 2016 NPPC for the two pension plans of \$26.3 million based on the Regulatory 15-year amortization method compares to the <u>actual 2015</u> expense of \$44.5 million based on the Regulatory 15-year amortization method as follows:

	Consolidated NPPC (in
	\$millions)
2015 Actual NPPC	\$44.5
Economic gains due to contributions, offset by lower and deferred asset losses	(3.5)
Reflection of updated data compared to roll-forward	(0.7)
Updated discount rate at December 31, 2015	(4.3)
Impact of lump sum plan change measured at December 31, 2015, offset by expiration of several prior service cost bases	1.1
Reflection of full year of 15-year (gain)/loss amortization (vs. 2015 use of 6 months of "Double Corridor")	(10.8)
2016 Preliminary NPPC	\$26.3

* Excludes WKE Non-Union results

Please note the following regarding these results:

1. As of January 1, 2016, LG&E and KU Energy LLC has selected the following economic assumptions: Discount rate:

	January 1, 2016
LG&E and KU Retirement Plan	4.58%
Louisville Gas and Electric Company	4.49%
Bargaining Employees' Retirement Plan	4.49%

All discount rates are based on the results of the Towers Watson BOND:Link model. At December 31, 2015, cash flows by plan were used to develop individual plan discount rates. Further information regarding the BOND:Link model parameters chosen by LKE can be found in our e-mail correspondence from January 8, 2016.

Rate of compensation increase:

The January 1, 2016 rate of compensation increase assumption for all LKE plans is a flat 3.50% at all ages.

Expected return on assets (EROA):

	January 1, 2016	
LG&E and KU Retirement Plan	7.00%	
Louisville Gas and Electric Company Bargaining Employees' Retirement Plan	7.00%	
Darganning Employeee Hearement Han		

2. All plan provisions are the same as those valued at January 1, 2015, with the exception of the lump sum option effective January 1, 2016 for the LG&E Bargaining Plan and the LG&E and KU Retirement Plan.

The percentage of retiring and terminating participants assumed to take a lump sum is 50%.

Lump sum benefits are valued reflecting the discount rate employed for accounting purposes and unisex RP-2014 healthy annuitant mortality table (e.g., 50/50 blend of gender specific tables), without collar adjustment (removing MP-2014 improvement projections from 2006-2014) and applying Scale BB 2-Dimensional mortality improvements form 2006 on a generational basis.

Detailed descriptions of the plan provisions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2016 (to be published during the coming months).

3. The following contributions made on January 15, 2016 for the LG&E and KU Retirement Plan and the Louisville Gas and Electric Company Bargaining Employees' Retirement Plan.

	Contribution (in \$millions)
LG&E and KU Retirement Plan	
LG&E non-union	\$4.7
Louisville Gas and Electric Company	\$6.7
Bargaining Employees' Retirement Plan	φ0.7

Actuarial Certification

In preparing the results presented in this letter (including attached exhibits), we have relied upon information regarding plan provisions, participants, assets and sponsor accounting policies and methods provided by LKE and other persons or organizations designated by LKE. We have relied on all the data and information provided as complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by LKE, may produce materially different results that could require that a revised report be issued.

The measurement date is January 1, 2016. The benefit obligations were measured as of January 1, 2016 and are based on participant data as of the census date, January 1, 2016.

Information about the fair value of plan assets was furnished to us by BNY Mellon. LKE also provided information about the general ledger account balances for the pension plan costs at December 31, 2015, which reflect the expected funded status of the plans before adjustment to reflect the plans' funded status based on the year-end measurements. Willis Towers Watson used information supplied by LKE regarding amounts recognized in accumulated other comprehensive income as of December 31, 2015. This data was reviewed for reasonableness and consistency, but no audit was performed.

As required by U.S. GAAP, the actuarial assumptions and the accounting policies and methods employed in the development of the pension cost and other financial reporting have been selected by LKE. Willis Towers Watson has concurred with these assumptions and methods. U.S. GAAP requires that each significant assumption "individually represent the best estimate of a particular future event."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. The numbers shown in this report are not rounded, but this is for convenience and should not imply precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs reported in this valuation will likely increase in future valuations (and vice versa). Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from the anticipated by the economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the end of an amortization period), and changes in plan provisions or applicable law.

The information contained in this report was prepared for the internal use of LKE and its auditors in connection with our actuarial valuations of the qualified pension plans. It is neither intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. LKE may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require LKE to provide them this report, in which case LKE will use best efforts to notify Willis Towers Watson in advance of this distribution. Further distribution to, or use by, other parties of all or part of this document is expressly prohibited without Willis Towers Watson's prior written consent. Willis Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to pension plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Towers Watson Delaware Inc. * *

*

Please do not hesitate to call if you have any questions.

Sincerely,

Jerrifu a. Della litto

Jennifer A. Della Pietra, ASA, EA

Senior Consulting Actuary Direct Dial: 215-246-6861

cc: Dan Arbough – LG&E and KU Energy LLC Jeanne Kugler – LG&E and KU Energy LLC David Ark - LG&E and KU Energy LLC George Sunder – PPL Corporation Julissa Burgos – PPL Corporation Kristin May, FSA, EA – Willis Towers Watson Brad Dreisbach, ASA – Willis Towers Watson

Ray losof

Royce S. Kosoff, FSA, EA, CFA

Senior Consulting Actuary Direct Dial: 215-246-6815

http://natct.internal.towerswatson.com/clients/604575/2016LKEProjects/Documents/FASB ASC 715 Results - LKE Qualified Pension Plans 2016.doc

Attachment #1 to Response to KIUC-1 Question No. 29 Page 14 of 27 Arbough

LG&E and KU Energy LLC ("LKE") 2016 Net Periodic Pension Cost Qualified Pension Plans

	Regulatory	Regulatory	Financial	Regulatory	Financial	Consolidated	Regulatory
			Non-Union Retirement Plan				Non-Union
	LG&E Union	LG&E					ServCo
Funded Status							
ABO	327,133,148	217,345,411					
PBO	327,133,148	241,563,544					
Fair value of assets	296,699,656	208,140,470					
Funded status	(30,433,492)	(33,423,074)					
Amounts recognized in accumulated other							
comprehensive income consist of:							
Net actuarial loss/(gain)	95,546,633	78,351,268					
Prior service cost/(credit)	29,308,285	6,837,647					
Transition obligation/(asset)		-					
Total	124,854,918	85,188,915					
Market related value of assets	302,645,498	213,332,310					
		-, ,					
2016 Net Periodic Pension Cost							
Service cost	1,165,140	1,839,898					12,213,263
Interest cost	14,152,287	10,705,521					22,600,171
Expected return on assets	(20,800,325)	(14,702,169)					(27,615,212)
Amortization of:							
Transition obligation (asset)	-	-					-
Prior service cost (credit)	4,471,357	1,697,500					4,068,717
Actuarial (gain) loss	6,840,372	5,763,202					5,910,275
Net periodic pension cost	5,828,831	5,303,952					17,177,214
Key assumptions:							
Discount rate	4.49%	4.58%					4.58%
Expected return on plan assets	7.00%	7.00%					7.00%
Rate of compensation increase	N/A	3.50%					3.50%

The results contained in this document are based on the data provided by LKE's outside administrator as of January 1, 2016. All other assumptions, methods, and plan provisions are the same as those used for the year-end 2015 financial statement fisclosures provided on January 22, 2016. The descriptions of the assumptions, methods, plan provisions, and limitations as set forth in the year-end 2015 financial statement disclosure letter should be considered part of these results.

Attachment #1 to Response to KIUC-1 Question No. 29 Page 15 of 27 Arbough

LG&E and KU Energy LLC ("LKE")

2016 Net Periodic Pension Cost Reflecting 15-year (Gain)/Loss Amortization Method Qualified Pension Plans

Willis Towers Watson IIIIIII

	Reg-15	Reg-15	Reg-15	Reg-15	Fin-15
	_		Non-Union Re	etirement Plan	
	LG&E Union	LG&E		ServCo (Regulatory)	
Funded Status ABO	327,133,148	217,345,411			
РВО	327,133,148	241,563,544			
Fair value of assets	296,699,656	208,140,470			
Funded status	(30,433,492)	(33,423,074)			
Amounts recognized in accumulated other comprehensive income consist of:					
Net actuarial loss/(gain)	98,753,615	80,559,160			
Prior service cost/(credit)	29,308,285	6,837,647			
Transition obligation/(asset)	-	-			
Total	128,061,900	87,396,807			
Market related value of assets	302,645,498	213,332,310			
2016 Net Periodic Pension Cost					
Service cost	1,165,140	1,839,898		12,213,263	
Interest cost	14,152,287	10,705,521		22,600,171	
Expected return on assets	(20,800,325)	(14,702,169)		(27,615,212)	
Amortization of:					
Transition obligation (asset)	-	-		-	
Prior service cost (credit)	4,471,357	1,697,500		4,068,717	
Actuarial (gain) loss	4,174,202	3,541,006		3,765,140	
Net periodic pension cost	3,162,661	3,081,756		15,032,079	
Key assumptions: Discount rate	4.49%	4.58%		4.58%	
Expected return on plan assets	7.00%	7.00%		7.00%	
Rate of compensation increase	N/A	3.50%		3.50%	
		0.0070		0.0070	

The results contained in this document are based on the data provided by LKE's outside administrator as of January 1, 2016. All other assumptions, methods, and plan provisions are the same as those used for the year-end 2015 financial statement fisclosures provided on January 22, 2016. The descriptions of the assumptions, methods, plan provisions, and limitations as set forth in the year-end 2015 financial statement disclosure letter should be considered part of these results.

June 3, 2016

Ms. Jeanne Kugler Manager, Risk Management LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202

Dear Jeanne:

2017-2021 PROJECTIONS OF PENSION AND POSTRETIREMENT WELFARE PLANS

Towers Watson Delaware, Inc. ("Willis Towers Watson") was engaged by LG&E and KU Energy LLC ("LKE" or "the Company") to provide 5-year projections of the Financial Accounting Standards Codification ("ASC") Topic 715 accounting cost for the following pension plans with allocations as requested by LKE:

- LG&E and KU Retirement Plan
- Louisville Gas and Electric Company Bargaining Employees' Retirement Plan

The exhibits for the years 2017-2021 are as follows:

- Estimated ASC 715 accounting cost
- Estimated cash contributions to the pension plan trusts for the LG&E and KU Retirement Plan and the Louisville Gas and Electric Company Bargaining Employees' Retirement Plan

The projections are based on the 2016 actuarial valuation results provided to you on May 2 (qualified pension plans) Except where otherwise noted, the assumptions, methods, data, and plan provisions used to develop these projections are the same as those used to develop the 2016 actuarial valuation results.

In addition, Willis Towers Watson was also engaged to provide 5-year projections of the PPA Funding Minimum Required Contribution for both pension plans. The exhibit for 2016-2021 shows the following:

- Estimated Minimum Required Contribution under ERISA/PPA
- Estimated Funding Balance used to supplement the expected cash contributions as determined by the ASC 715 projections under the "double corridor" method
- Estimated Funded Status both before and after adjustment for Funding Balances

The projections are based on the preliminary 2016 funding results to be published during the coming months. Except where otherwise noted, the assumptions, methods, data, and plan provisions used to develop these projections are the same as those used to develop the 2016 actuarial valuation results.

Reconciliation to September 2, 2015 Budget Projections (Reflecting 15-year Amortization Method)

The projected 2017 consolidated NPPC for the two pension plans of \$29.2 million compares to the projected 2017 consolidated expense of \$27.1 million based on the Regulatory 15-year amortization method provided in our September 2, 2015 e-mail as follows:

	Consolidated NPPC (in \$millions)
2017 Projected NPPC provided on September 2, 2016	\$27.1
Actual 2015 return (vs. expected return in budget), 7.00% expected return on assets assumption (compared to 6.75% in budget)	(4.9)
Reflection of updated data compared to roll-forward	(0.5)
Updated discount rate	1.3
Change in service cost growth assumption	(0.5)
Reflection of December 31, 2015 lump sum mortality assumption (budget reflected preliminary assumption set prior to November meeting with LKE/PPL)	6.7
2017 Budget Estimate	\$29.2

* Excludes WKE Non-Union results

Results of Funding Projections 2016-2021

Current funding policy of contributing an amount equal to U.S. GAAP NPPC, plus use of credit balance, is expected to be sufficient throughout the projection period for both qualified plans.

- Estimated Minimum Required Contributions in all years exceed estimated cash contributions for the LG&E and KU Retirement Plan. For the Bargaining Plan, estimated cash contributions exceed the Minimum Required Contribution for all years.
- Additional funding strategies, for example, voluntary forfeiture of Funding Balances as of January 1, 2016 to avoid funding shortfall entirely, were outside the scope of these projections. We anticipate discussing this in greater detail in July.

These projections reflect the following key economic assumptions:

Discount rate:

	December 31, 2016 and all subsequent vears	December 31, 2015
LG&E and KU Retirement Plan	4.42%	4.58%
Louisville Gas and Electric Company Bargaining Employees' Retirement Plan	4.34%	4.49%

December 31, 2015 discount rates are based on the results of the Willis Towers Watson BOND:Link model as of December 31, 2015. Annuity cash flows by plan are based on the results of the 2015 actuarial valuation results.

December 31, 2016 and all subsequent years discount rates were developed based on April 30, 2016 BOND:Link results plus 25 basis points.

Rate of compensation increase:

The projected rates of compensation increase for all legacy LKE plans are flat at all ages.

	December 31, 2016 and all subsequent years	December 31, 2015
All legacy LKE plans	3.50%	3.50%

Expected return on assets (EROA):

	December 31, 2016 and all subsequent years	December 31, 2015
LG&E and KU Retirement Plan	7.00%	7.00%
Louisville Gas and Electric Company Bargaining Employees' Retirement Plan	7.00%	7.00%

Service cost growth:

The service cost for the qualified pension plans is assumed to remain constant for future years.

LG&E and KU Retirement Plan0.00%Louisville Gas and Electric Company0.00%		All projection years
	LG&E and KU Retirement Plan	0.00%
Bargaining Employees Retirement Plan	Louisville Gas and Electric Company Bargaining Employees' Retirement Plan	0.00%

Actual return on assets:

	2016 and all
	subsequent years
LG&E and KU Retirement Plan	7.00%
Louisville Gas and Electric Company Bargaining Employees' Retirement Plan	7.00%



Demographic assumptions:

1. All demographic assumptions are the same as those selected by LKE at December 31, 2015.

A summary of all other assumptions can be found in the Financial Disclosure letter provided to LKE on January 20, 2016. Detailed descriptions of these assumptions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2016 (to be published during the coming months).

2. All plan provisions are the same as those valued at January 1, 2016 with the exception of the dollar per month multiplier for the Louisville Gas and Electric Company Bargaining Employees' Retirement Plan, which is assumed to increase 3% per year throughout the projection.

Detailed descriptions of the plan provisions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2016 (to be published during the coming months).

- 3. For the Louisville Gas and Electric Company Bargaining Employees' Retirement Plan, the increases in benefit multipliers are assumed to be collectively bargained and reflected every three years. The increase in Prior Service Cost for the increase in the benefit multipliers for 2018-2020 is assumed to be reflected at December 31, 2017 and the increase for 2021-2023 is assumed to be reflected at December 31, 2020. For funding purposes, one-year increases are reflected annually.
- 4. The expected future service to retirement age used in the development of the unrecognized (gain) / loss amortization for the two pension plans is equal to the amount developed in the January 1, 2016 actuarial valuation results and is assumed to decrease 0.5 per year for the pension plans to reflect

the aging of the closed populations.

- 5. For funding purposes, all contributions to the two pension plans are assumed to be made on January 15 of the year shown and are reflected as a receivable contribution for the prior plan year. For accounting purposes, all pension contributions are assumed to be made at the end of the year shown.
- 6. Administrative expenses of the qualified pension plans were assumed to remain level with 2016 during the projection period and are allocated based on actual administrative expenses in 2015.

Actuarial certification

In preparing the calculations contained in this letter, Willis Towers Watson has used information and data provided to us by LKE and other persons or organizations designated by LKE. We have relied on all the data and information provided, including plan provisions and asset information, as being complete and accurate. We have reviewed this information for overall reasonableness and consistency but have neither audited nor independently verified this information.

As required by ASC 715, the actuarial assumptions and methods employed in the development of the pension and postretirement plan obligations have been selected by the plan sponsor. Willis Towers Watson has concurred with these assumptions and methods. ASC 715 requires that each significant assumption "individually represent the best estimate of a particular future event."

For funding purposes, the plan sponsor selected, as prescribed by regulation, key assumptions and funding methods (including asset valuation method and choice among prescribed interest rates) employed in the development of the contribution. To the extent not prescribed by ERISA, the Internal Revenue Code and regulatory guidance from the Treasury and the IRS, or selected by the sponsor, the actuarial assumptions and methods employed in the development of the contribution amounts have been selected by Willis Towers Watson, with the concurrence of the plan sponsor. It is beyond the scope of this forecast to analyze the reasonableness and appropriateness of prescribed methods and assumptions, or to analyze other sponsor elections from among the alternatives available for prescribed methods and assumptions.

The results documented in this letter are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. Certain plan provisions may be approximated or determined to be immaterial and therefore not valued. Assumptions may be made about participant data or other factors. We have made reasonable efforts to ensure that items that are material in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in our calculations. As these differences arise, contributions or the cost for accounting purposes will be adjusted in future valuations to take changes into account. If these adjustments become material, they may result in future adjustments to the valuation model.

The results shown in this letter have been developed based on actuarial assumptions that, to the extent evaluated or selected by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

The numbers in this letter are not rounded, but this is for convenience only and should not imply precision, which is not a characteristic of actuarial calculations.

The calculations provided in this letter have been prepared solely for the benefit of LKE for budgeting purposes. This letter should not be used for other purposes, and we accept no responsibility for any such use. It should not be relied upon by, or shared with, any third parties without Willis Towers Watson's prior written consent.

This letter is provided subject to the terms set out herein and in our engagement letter dated March 28, 2013 and any accompanying or referenced terms and conditions.

This letter provides actuarial calculations. It does not constitute legal, accounting, tax or investment advice. We encourage you to consult with qualified advisors with respect to those matters.

The undersigned consulting actuaries are members of the Society of Actuaries and other professional actuarial organizations and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to retirement plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Willis Towers Watson.

* * * * *

Please do not hesitate to call if you have any questions.

Sincerely,

Koyre Koso

Royce S. Kosoff, FSA, EA, CFA Senior Consulting Actuary Direct Dial: 215-246-6815

Jennifer A. Della Pietra, ASA, EA Senior Consulting Actuary Direct Dial: 215-246-6861

cc: David Crosby – LG&E and KU Energy LLC Dan Arbough – LG&E and KU Energy LLC George Sunder – PPL Corporation Julissa Burgos – PPL Corporation Brad Dreisbach – Willis Towers Watson

http://natct.internal.towerswatson.com/clients/604575/2016lkeprojects/documents/fasb asc 715 and ppa funding projections 2017-2021.docx

LG&E & KU Energy LLC Estimated ASC 715 Net Periodic Pension Cost ("NPPC") For Qualified Pension Plans 2017 Fiscal Year

	Regulatory				Regulatory	Regulatory
		LG&E a	nd KU Retire	ement Plan		
	LG&E					
	Non-union				LG&E Union	Servco
Service cost	2,213,200				1,401,836	14,293,601
Interest cost	9,703,879				12,506,524	21,550,246
Expected return on assets	(14,526,869)				(20,417,041)	(27,362,375)
Amortizations:						
Transition	-				-	-
Prior service cost	1,564,417				4,471,357	3,960,771
(Gain)/loss	10,418,050				12,149,737	13,651,338
ASC 715 NPBC	9,372,677				10,112,413	26,093,581

LG&E & KU Energy LLC Estimated ASC 715 Net Periodic Pension Cost ("NPPC") For Qualified Pension Plans 2018 Fiscal Year

	Regulatory				Regulatory	Regulatory
		LG&E a	and KU Reti	rement Plan		
	LG&E					
	Non-union				LG&E Union	Servco
Service cost	2,213,200				1,401,836	14,293,601
Interest cost	9,524,874				12,500,873	21,740,794
Expected return on assets	(14,937,988)				(20,635,008)	(28,163,857)
Amortizations:						
Transition	-				-	-
Prior service cost	1,334,204				6,050,811	3,459,919
(Gain)/loss	8,961,742				10,162,085	12,945,610
ASC 715 NPBC	7,096,032				9,480,597	24,276,067

<u>Notes</u>

1. These accounting projections are based on the January 1, 2016 valuation results provided on May 2, 2016. The description of the data, assumptions, methods, plan provisions, and limitations as set forth in the accounting valuation results cover letter should be considered part of these results. Please see the attached letter for a description of all other assumptions and methods used in this analysis.

2. Discount rate is assumed to be 3.78% for the Non-Union plan and 3.69% for the Union plan, which reflects an 80 basis points decrease from the December 31, 2015 discount rate for both plans for measurement date December 31, 2016 and beyond. The decrease in discount rate reflects the market conditions from December 31, 2015 to June 30, 2016.

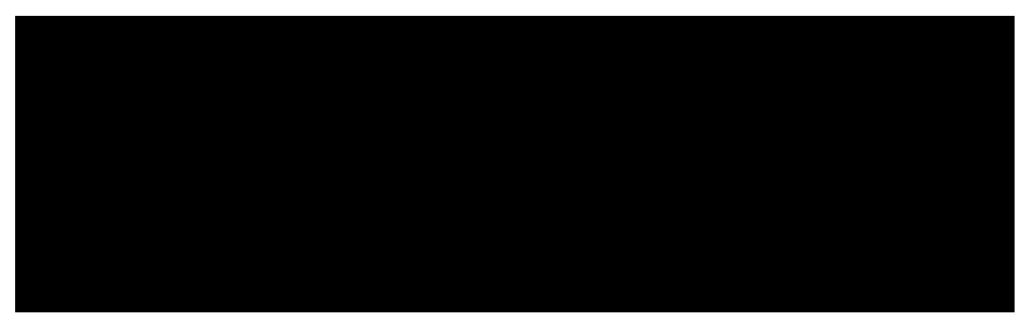
3. The fair value of assets is assumed to earn 7.00% in all years.

4. Service cost is assumed to remain constant (0.00% growth).

5. Expected future service is assumed to decrease 0.5 per year for both qualified plans.

LG&E & KU Energy LLC Estimated ASC 715 Net Periodic Pension Cost ("NPPC") For Qualified Pension Plans 2019 Fiscal Year

	Regulatory				Regulatory	Regulatory
		LG&E a	and KU Reti	rement Plan		
	LG&E					
	Non-union				LG&E Union	Servco
Service cost	2,213,200				1,401,836	14,293,601
Interest cost	9,322,048				12,067,498	21,905,121
Expected return on assets	(15,196,238)				(20,832,663)	(28,910,890)
Amortizations:						
Transition	-				-	-
Prior service cost	409,879				5,887,146	1,678,075
(Gain)/loss	7,716,345				9,530,971	12,224,992
ASC 715 NPBC	4,465,234				8,054,788	21,190,899



<u>Notes</u>

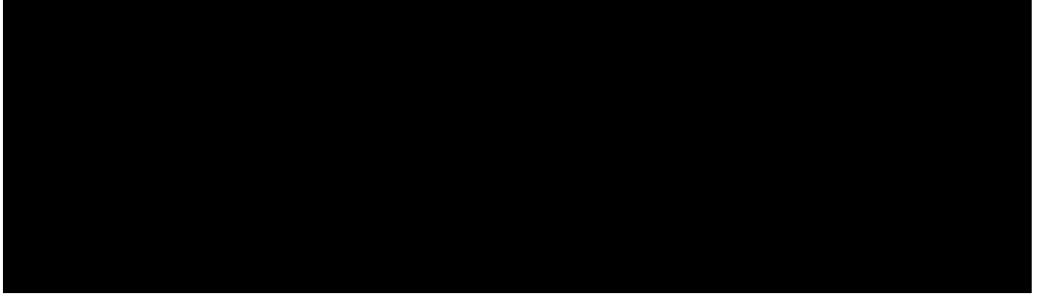
1. These accounting projections are based on the January 1, 2016 valuation results provided on May 2, 2016. The description of the data, assumptions, methods, plan provisions, and limitations as set forth in the accounting valuation results cover letter should be considered part of these results. Please see the attached letter for a description of all other assumptions and methods used in this analysis.

2. Discount rate is assumed to be 3.78% for the Non-Union plan and 3.69% for the Union plan, which reflects an 80 basis points decrease from the December 31, 2015 discount rate for both plans for measurement date December 31, 2016 and beyond. The decrease in discount rate reflects the market conditions from December 31, 2015 to June 30, 2016.

3. The fair value of assets is assumed to earn 7.00% in all years.

4. Service cost is assumed to remain constant (0.00% growth).

5. Expected future service is assumed to decrease 0.5 per year for both qualified plans.



<u>Notes</u>

1. These accounting projections are based on the January 1, 2016 valuation results provided on May 2, 2016. The description of the data, assumptions, methods, plan provisions, and limitations as set forth in the accounting valuation results cover letter should be considered part of these results. Please see the attached letter for a description of all other assumptions and methods used in this analysis.

2. Discount rate is assumed to be 3.78% for the Non-Union plan and 3.69% for the Union plan, which reflects an 80 basis points decrease from the December 31, 2015 discount rate for both plans for measurement date December 31, 2016 and beyond. The decrease in discount rate reflects the market conditions from December 31, 2015 to June 30, 2016.

3. The fair value of assets is assumed to earn 7.00% in all years.

4. Service cost is assumed to remain constant (0.00% growth).

5. Expected future service is assumed to decrease 0.5 per year for both qualified plans.

			(· · · · ,
		LG&E and KU Retirement Plan	
	LG&E		
	Nonunion		LG&E Union
1/15/2016 actual	4,700,000		6,700,000
1/15/2017	9,372,677		10,112,413
1/15/2018	7,096,032		9,480,597
1/15/2019	4,465,234		8,054,788
1/15/2020			
1/15/2021			

LG&E & KU Energy LLC Estimated Cash Contributions for Plan Years 2016-2021 (\$ millions)

LG&E & KU Energy LLC Estimated Net Periodic Pension Cost ("NPPC") Reflecting 15-year (Gain)/Loss Amortization Method For Qualified Pension Plans 2017 Fiscal Year

	Reg-15		Reg-15		Reg-15		
	LG&E and KU Retirement Plan						
	LG&E						
	Non-union		Servco (Regulatory)		LG&E Union		
Service cost	2,213,200		14,293,601		1,401,836		
Interest cost	9,703,879		21,550,246		12,506,524		
Expected return on assets	(14,526,869)		(27,362,375)		(20,417,041)		
Amortizations:							
Transition	-		-		-		
Prior service cost	1,564,417		3,960,771		4,471,357		
(Gain)/loss	5,244,493		8,153,955		6,347,677		
ASC 715 NPBC	4,199,120		20,596,198		4,310,353		

LG&E & KU Energy LLC

Estimated Net Periodic Pension Cost ("NPPC") Reflecting 15-year (Gain)/Loss Amortization Method For Qualified Pension Plans 2018 Fiscal Year

	Reg-15		Reg-15		Reg-15
	LG&E				
	Non-union	Serve	co (Regulatory)		LG&E Union
Service cost	2,213,200		14,293,601		1,401,836
Interest cost	9,524,874		21,740,794		12,500,873
Expected return on assets	(14,937,988)		(28,163,857)		(20,635,008)
Amortizations:					
Transition	-		-		-
Prior service cost	1,334,204		3,459,919		6,050,811
(Gain)/loss	5,365,802		8,250,371		6,468,967
ASC 715 NPBC	3,500,092		19,580,828		5,787,479

<u>Notes</u>

1. These accounting projections are based on the 15-year amortization method valuation results provided on May 2, 2016. The description of the data, assumptions, methods, plan provisions, and limitations as set forth in the accounting valuation results cover letter should be considered part of these results. Please see the attached letter for a description of all other assumptions and methods used in this analysis.

2. Discount rate is assumed to be 3.78% for the Non-Union plan and 3.69% for the Union plan, which reflects an 80 basis points decrease from the December 31, 2015 discount rate for both plans for measurement date December 31, 2016 and beyond. The decrease in discount rate reflects the market conditions from December 31, 2015 to June 30, 2016.

3. The fair value of assets is assumed to earn 7.00% in all years.

4. Service cost is assumed to remain constant (0.00% growth).

5. Expected future service is assumed to decrease 0.5 per year for both qualified plans.

6. Projections reflect the 15-year amortization method as outlined in the April 20, 2015 rate settlement agreement and as confirmed on June 17, 2015 by LKE.

Willis Towers Watson I.I'I'I.I

LG&E & KU Energy LLC Estimated Net Periodic Pension Cost ("NPPC") Reflecting 15-year (Gain)/Loss Amortization Method For Qualified Pension Plans 2019 Fiscal Year

	Reg-15		Reg-15	Reg-15
		LG&E and KU I	Retirement Plan	
	LG&E			
	Non-union		Servco (Regulatory)	LG&E Union
Service cost	2,213,200		14,293,601	1,401,836
Interest cost	9,322,048		21,905,121	12,067,498
Expected return on assets	(15,196,238)		(28,910,890)	(20,832,663)
Amortizations:				
Transition	-		-	-
Prior service cost	409,879		1,678,075	5,887,146
(Gain)/loss	5,483,406		8,339,715	6,656,330
ASC 715 NPBC	2,232,295		17,305,622	5,180,147



Notes

1. These accounting projections are based on the 15-year amortization method valuation results provided on May 2, 2016. The description of the data, assumptions, methods, plan provisions, and limitations as set forth in the accounting valuation results cover letter should be considered part of these results. Please see the attached letter for a description of all other assumptions and methods used in this analysis.

2. Discount rate is assumed to be 3.78% for the Non-Union plan and 3.69% for the Union plan, which reflects an 80 basis points decrease from the December 31, 2015 discount rate for both plans for measurement date December 31, 2016 and beyond. The decrease in discount rate reflects the market conditions from December 31, 2015 to June 30, 2016.

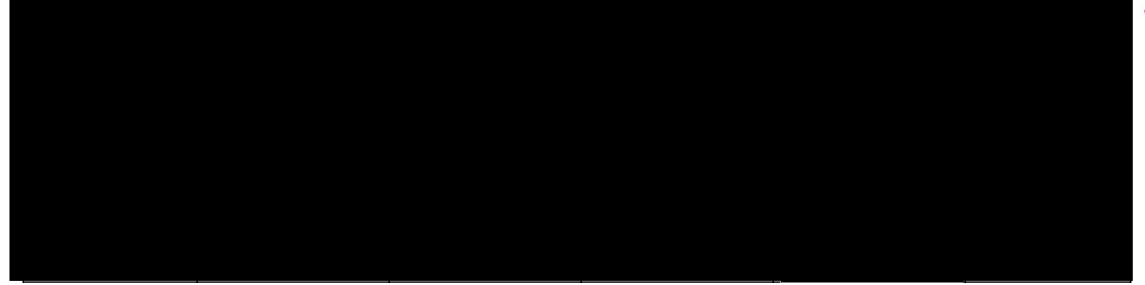
3. The fair value of assets is assumed to earn 7.00% in all years.

4. Service cost is assumed to remain constant (0.00% growth).

5. Expected future service is assumed to decrease 0.5 per year for both qualified plans.

6. Projections reflect the 15-year amortization method as outlined in the April 20, 2015 rate settlement agreement and as confirmed on June 17, 2015 by LKE.

Willis Towers Watson I.I'I'I.I



<u>Notes</u>

1. These accounting projections are based on the 15-year amortization method valuation results provided on May 2, 2016. The description of the data, assumptions, methods, plan provisions, and limitations as set forth in the accounting valuation results cover letter should be considered part of these results. Please see the attached letter for a description of all other assumptions and methods used in this analysis.

2. Discount rate is assumed to be 3.78% for the Non-Union plan and 3.69% for the Union plan, which reflects an 80 basis points decrease from the December 31, 2015 discount rate for both plans for measurement date December 31, 2016 and beyond. The decrease in discount rate reflects the market conditions from December 31, 2015 to June 30, 2016.

3. The fair value of assets is assumed to earn 7.00% in all years.

4. Service cost is assumed to remain constant (0.00% growth).

5. Expected future service is assumed to decrease 0.5 per year for both qualified plans.

6. Projections reflect the 15-year amortization method as outlined in the April 20, 2015 rate settlement agreement and as confirmed on June 17, 2015 by LKE.

June 3, 2016

Ms. Jeanne Kugler Manager, Risk Management LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202

Dear Jeanne:

2017-2021 PROJECTIONS POSTRETIREMENT WELFARE PLANS

Towers Watson Delaware, Inc. ("Willis Towers Watson") was engaged by LG&E and KU Energy LLC ("LKE" or "the Company") to provide 5-year projections of the Financial Accounting Standards Codification ("ASC") Topic 715 accounting cost for the following pension and postretirement welfare plans with allocations as requested by LKE:

LG&E and KU Postretirement Benefit Plan

The exhibits for the years 2017-2021 are as follows:

Estimated ASC 715 accounting cost

Expected cash flows for the LG&E and KU Postretirement Benefit Plan

Expected employer contributions to the 401(h) account of the LG&E and KU Postretirement Benefit Plan

The projections are based on the 2016 actuarial valuation results provided to you on May 6 (LG&E and KU Postretirement Benefit Plan). Except where otherwise noted, the assumptions, methods, data, and plan provisions used to develop these projections are the same as those used to develop the 2016 actuarial valuation results.

Except where otherwise noted, the assumptions, methods, data, and plan provisions used to develop these projections are the same as those used to develop the 2016 actuarial valuation results.

Reconciliation to September 2, 2015 Budget Projections

The projected 2017 consolidated U.S. GAAP NPBC for the postretirement benefit plan is \$7.5 million compared to the projected 2017 consolidated NPBC of \$8.5 million provided in our June 15, 2015 e-mail. The decrease of \$1.0 million is primarily due to demographic gains resulting from the reflection of valuation data as of 1/1/2016 and updated per capita claim cost assumptions, including aging table, for the 2016 valuation.



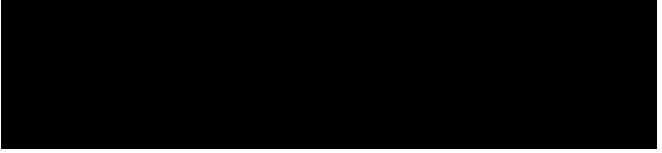
These projections reflect the following key economic assumptions:

Discount rate:

	December 31, 2016 and all subsequent vears	December 31, 2015	
	youro		
LG&E and KU Postretirement Benefit Plan	4.31%	4.49%	

December 31, 2015 discount rates are based on the results of the Willis Towers Watson BOND:Link model as of December 31, 2015. Annuity cash flows by plan are based on the results of the 2015 actuarial valuation results.

December 31, 2016 and all subsequent years discount rates were developed based on April 30, 2016 BOND:Link results plus 25 basis points.



Expected return on assets (EROA):

	December 31, 2016 and all subsequent years	December 31, 2015	
LG&E Energy LLC Postretirement Benefit			
Plan			
- Union VEBA*	0.00%	0.00%	
- Nonunion VEBA*	0.00%	0.00%	
- 401(h) sub-account	7.00%	7.00%	

* Historically used as a short-term payment vehicle, not long-term investment trust

Service cost growth:

The service cost for the qualified pension plans is assumed to remain constant for future years. The service cost for the welfare plan is assumed to grow at the same rate as the discount rate.

	All projection years
LG&E and KU Postretirement Benefit Plan	4.31%

Actual return on assets:

	2016 and all subsequent vears
LG&E Energy LLC Postretirement Benefit Plan - Union VEBA* - Nonunion VEBA* - 401(h) sub-account	0.00% 0.00% 7.00%

Health care cost trend:

	December 31, 2016 and	December 31, 2015
	all subsequent years	
2016	N/A	6.8%
2017	7.0%	6.4%
2018	6.8%	6.0%
2019	6.6%	5.5%
2020	6.2%	5.0%
2021	5.8%	5.0%
2022	5.4%	5.0%
2023+	5.0%	5.0%

Demographic assumptions:

1. All demographic assumptions are the same as those selected by LKE at December 31, 2015.

A summary of all other assumptions can be found in the Financial Disclosure letter provided to LKE on January 20, 2016. Detailed descriptions of these assumptions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2016 (to be published during the coming months).

2. All plan provisions are the same as those valued at January 1, 2016

Detailed descriptions of the plan provisions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2016 (to be published during the coming months).

The LG&E and KU Postretirement Benefit Plan is not closed, so there is no assumed decrease in the amortization period.

5.

All contributions to the LG&E and KU Postretirement Benefit Plan are assumed to be made at the middle of the year (6/30). The projections reflect no prefunding for the Non-union and Union VEBAS.

6.

Postretirement Benefit Plan administrative expenses were kept consistent with 2015 actual expenses during the projection period.

Actuarial certification

In preparing the calculations contained in this letter, Willis Towers Watson has used information and data provided to us by LKE and other persons or organizations designated by LKE. We have relied on all the data and information provided, including plan provisions and asset information, as being complete and accurate. We have reviewed this information for overall reasonableness and consistency but have neither audited nor independently verified this information.

As required by ASC 715, the actuarial assumptions and methods employed in the development of the pension and postretirement plan obligations have been selected by the plan sponsor. Willis Towers Watson has concurred with these assumptions and methods. ASC 715 requires that each significant assumption "individually represent the best estimate of a particular future event."

For funding purposes, the plan sponsor selected, as prescribed by regulation, key assumptions and funding methods (including asset valuation method and choice among prescribed interest rates) employed in the development of the contribution. To the extent not prescribed by ERISA, the Internal Revenue Code and regulatory guidance from the Treasury and the IRS, or selected by the sponsor, the actuarial assumptions and methods employed in the development of the contribution amounts have been selected by Willis Towers Watson, with the concurrence of the plan sponsor. It is beyond the scope of this forecast to analyze the reasonableness and appropriateness of prescribed methods and assumptions, or to analyze other sponsor elections from among the alternatives available for prescribed methods and assumptions.

The results documented in this letter are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. Certain plan provisions may be approximated or determined to be immaterial and therefore not valued. Assumptions may be made about participant data or other factors. We have made reasonable efforts to ensure that items that are material in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in our calculations. As these differences arise, contributions or the cost for accounting purposes will be adjusted in future valuations to take changes into account. If these adjustments become material, they may result in future adjustments to the valuation model.

The results shown in this letter have been developed based on actuarial assumptions that, to the extent evaluated or selected by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

The numbers in this letter are not rounded, but this is for convenience only and should not imply precision, which is not a characteristic of actuarial calculations.

The calculations provided in this letter have been prepared solely for the benefit of LKE for budgeting purposes. This letter should not be used for other purposes, and we accept no responsibility for any such use. It should not be relied upon by, or shared with, any third parties without Willis Towers Watson's prior written consent.

This letter is provided subject to the terms set out herein and in our engagement letter dated March 28, 2013 and any accompanying or referenced terms and conditions.

This letter provides actuarial calculations. It does not constitute legal, accounting, tax or investment advice. We encourage you to consult with qualified advisors with respect to those matters.

The undersigned consulting actuaries are members of the Society of Actuaries and other professional actuarial organizations and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to retirement plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Willis Towers Watson.

* * * * *

Please do not hesitate to call if you have any questions.

Sincerely,

Kaya Koso

Royce S. Kosoff, FSA, EA, CFA Senior Consulting Actuary Direct Dial: 215-246-6815

Jennifer A. Della Pietra, ASA, EA Senior Consulting Actuary Direct Dial: 215-246-6861

cc: David Crosby – LG&E and KU Energy LLC Dan Arbough – LG&E and KU Energy LLC George Sunder – PPL Corporation Julissa Burgos – PPL Corporation Brad Dreisbach – Willis Towers Watson

LG&E & KU Energy LLC 2017 Estimated ASC 715 Net Periodic Benefit Cost ("NPBC") For Postretirement Benefit Plan

	Regulatory	Regulatory	Regulatory
	LG&E	LG&E Union	ServCo
ervice cost	601,912	485,592	2,490,90
nterest cost	1,348,668	1,943,933	1,986,95
xpected return on assets	(745,535)		(3,251,27
mortizations:			
Transition	-		-
Prior service cost	78,595	496,348	131,66
(Gain)/loss	-	(58,961	-
SC 715 NPBC	1,283,640	2,866,912	1,358,24

LG&E & KU Energy LLC 2018 Estimated ASC 715 Net Periodic Benefit Cost ("NPBC") For Postretirement Benefit Plan

	Regulatory	Regulatory	Regulatory
	LG&E	_G&E Union	ServCo
Service cost	624,123	503,510	2,582,819
nterest cost	1,328,698	1,894,707	2,063,761
Expected return on assets	(720,796)	-	(3,604,57
Amortizations:			
Transition	-	-	-
Prior service cost	78,595	496,348	131,66
(Gain)/loss	-	(63,928)	-
SC 715 NPBC	1,310,620	2,830,637	1,173,67

<u>Notes</u>

1. These accounting projections are based on the January 1, 2016 valuation results provided on May 6, 2016. The description of the data, assumptions, methods, plan provisions, and limitations as set forth in the accounting valuation results cover letter should be considered part of these results. Please see the attached letter for a description of all other assumptions and methods used in this analysis, including a discount rate of 3.69% and revised per capital claim cost trend assumption.

Non-union and Union VEBA amounts are assumed to remain level over the projection period (i.e., contributions equal disbursements and a 0.00% actual return on assets). 401(h) amounts are assumed to earn 7.00% in 2016 and subsequent years. Contributions to the 401(h) account are assumed to be equal to the maximum deductible amount, starting in 2016 and are expected to be contributed at June 30th of the following fiscal year. Benefit payments are assumed to be paid from the 401(h) account beginning in 2017, to the extent allowable.
 We have assumed service cost growth equal to the discount rate (3.69% per year).

LG&E & KU Energy LLC 2019 Estimated ASC 715 Net Periodic Benefit Cost ("NPBC") For Postretirement Benefit Plan

	Regulatory	Regulatory	Regulatory
	LG&E		Some
		LG&E Union	ServCo
Service cost	647,153	522,090	2,678,12
Interest cost	1,307,008	1,839,559	2,132,76
Expected return on assets	(691,726)		(3,955,55
Amortizations:			
Transition	-		-
Prior service cost	78,595	496,348	131,66
(Gain)/loss	-	(69,710)	-
SC 715 NPBC	1,341,030	2,788,287	987,00

<u>Notes</u>

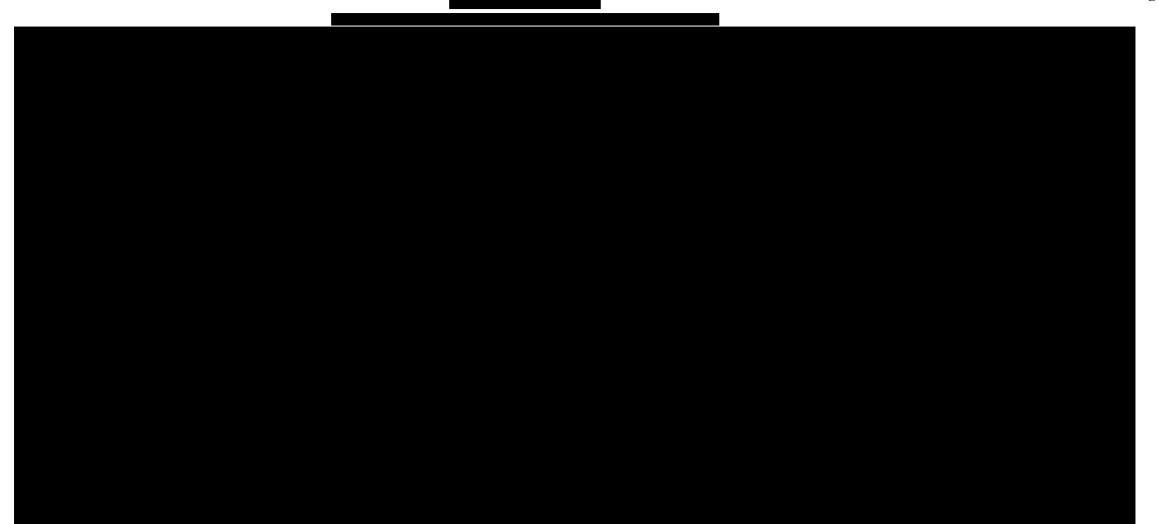
1. These accounting projections are based on the January 1, 2016 valuation results provided on May 6, 2016. The description of the data, assumptions, methods, plan provisions, and limitations as set forth in the accounting valuation results cover letter should be considered part of these results. Please see the attached letter for a description of all other assumptions and methods used in this analysis, including a discount rate of 3.69% and revised per capita claim trend assumption.

Non-union and Union VEBA amounts are assumed to remain level over the projection period (i.e., contributions equal disbursements and a 0.00% actual return on assets). 401(h) amounts are assumed to earn 7.00% in 2016 and subsequent years. Contributions to the 401(h) account are assumed to be equal to the maximum deductible amount, starting in 2016 and are expected to be contributed at June 30th of the following fiscal year. Benefit payments are assumed to be paid from the 401(h) account beginning in 2017, to the extent allowable.
 We have assumed service cost growth equal to the discount rate (3.69% per year).



PLAN PROVISION CHANGES FOR POSTRETIREMENT BENEFIT PLAN USED IN 2017-2021 PROJECTIONS

Effective Date for Projection	on	
Purposes	Non-Union and LG&E Union Plans	
January 1, 2017		
January 1, 2018		
January 1, 2019		



May 2, 2016

Ms. Jeanne Kugler Manager, Risk Management LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202

Dear Jeanne:

2016 ASC 715 ACCOUNTING RESULTS FOR THE POSTRETIREMENT BENEFIT PLAN

LG&E and KU Energy LLC ("LKE" or "the Company") engaged Towers Watson Delaware, Inc. ("Willis Towers Watson") to determine the Net Periodic Benefit Cost/Income ("NPBC") for the LG&E and KU Energy Postretirement Benefit Plan, in accordance with FASB Accounting Standards Codification Topic 715 ("ASC 715") for the fiscal year beginning January 1, 2016. The exhibits that follow provide results for the plan, with allocations as requested by LKE.

Reconciliation to June 26, 2015 Budget Projections

The preliminary 2016 consolidated US GAAP NPBC for the postretirement benefit plan of \$9.4 million compares to the projected 2016 consolidated NPBC of \$10.3 million provided in our June 26, 2015 e-mail as follows:

	Consolidated US GAAP NPBC (in
	\$millions)
2016 Projected NPBC provided on June 26, 2015	\$10.3
Actual 2015 return (vs. expected return in budget), offset by 7.00% EROA compared to 6.75% in budget	0.2
Demographic gains due to updated data compared to roll forward	(0.5)
Updated discount rate at December 31, 2015	0.0
Reflection of updated per capita claims data, including aging table	(0.6)
2016 Preliminary NPBC	\$9.4

Reconciliation to Actual 2015 NPBC

The preliminary 2016 consolidated US GAAP NPBC for the postretirement benefit plan of \$9.4 million compares to the actual 2015 consolidated NPBC of \$11.1 million as follows:

	Consolidated US
	GAAP NPBC (in
	\$millions)
2015 Actual NPBC	\$11.1
Economic gains due to asset increases during 2015	(0.4)
Demographic gains due to updated data	(0.3)
Updated discount rate at December 31, 2015	0.0
Reflection of updated per capita claims data, including aging table	(0.6)
Expiration of Prior Service Cost Bases for LG&E Union	(0.4)
2016 Preliminary NPBC	\$9.4

Please note the following regarding these results:

1. As of January 1, 2016, LG&E and KU Energy LLC has selected the following economic assumptions:

Discount rate:

The discount rate of 4.49% is based on the results of the Towers Watson BOND:Link model. At December 31, 2015, cash flows by plan were used to develop individual discount rates. Further information regarding the BOND:Link model parameters chosen by LKE can be found in our e-mail correspondence from January 8, 2016.

Rate of compensation increase:

The January 1, 2016 rate of compensation increase assumption for the plan is a flat 3.50% at all ages.

Expected return on assets (EROA):

The January 1, 2016 EROA assumption for the plan is 7.00% for the 401(h) sub-account and 0.00% for the Union and Non-union VEBAs, which have historically been used as short-term payment vehicles.

Health care cost trend:

	December 31, 2015
2016	6.8%
2017	6.4%
2018	6.0%
2019	5.5%
2020+	5.0%

Per capita claims cost:

The per capita claims costs and employee contribution amounts for 2016 were provided by Mercer. We have reviewed the claims information for reasonableness and consistency, but have neither audited nor independently verified this information.

In addition, the aging table was updated and provided by Mercer as follows:

Age	January 1, 2016	January 1, 2015
20 – 24	2.35%	3.5%
25 – 29	5.89%	3.5%
30 – 34	2.53%	3.5%
35 – 39	1.92%	3.5%
40 – 44	2.73%	3.5%
45 – 49	4.23%	3.5%
50 – 54	4.38%	3.5%
55 – 59	4.11%	3.5%
60 - 64	4.57%	3.5%
65 – 69	2.41%	2.5%
70 – 74	1.94%	2.0%
75 – 79	1.33%	1.5%
80 – 84	0.78%	1.5%
85 – 90	0.19%	1.5%
90 – 94	-1.12%	1.5%
95+	0.00%	1.5%

 All plan provisions are the same as those valued at January 1, 2015. Detailed descriptions of the plan provisions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2015 (to be published during the coming months). 3. The expected contributions to the 401(h) sub-account are assumed to be contributed on June 30th, 2016 and, therefore, six months of expected return on assets is reflected. The expected contributions to the Union and Non-union VEBAs are assumed to be made monthly equal to the amounts paid out of the VEBA account each month.

LG&E Non-union \$ 0.937 ServCo \$ 3.887	\$ millions	401(h) Sub-account Contributions
ServCo \$ 3.887	LG&E Non-union	\$ 0.937
	ServCo	\$ 3.887
	ServCo	\$ 3.887

4. Under PPACA, the Transitional Reinsurance Fee ("TRF") is scheduled to be collected from both selfinsured employer medical plans and fully insured medical plans beginning in 2014 and continuing through 2016 as a means to help stabilize premiums for coverage in the individual market (inside and outside the exchanges). Consistent with the prior year, the TRF will be accounted for outside of the plan, and therefore, the 2016 postretirement benefit obligations have not been adjusted to reflect the expected cost of the TRF.

Actuarial Certification

In preparing the results presented in this letter (including the attached exhibit), we have relied upon information regarding plan provisions, participants, assets and sponsor accounting policies and methods provided by LKE and other persons or organizations designated by LKE. We have relied on all the data and information provided as complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by LKE, may produce materially different results that could require that a revised report be issued.

The measurement date is January 1, 2016. The benefit obligations were measured as of January 1, 2016 and are based on participant data as of the census date, January 1, 2016.

Information about the fair value of plan assets was furnished to us by BNY Mellon. LKE also provided information about the general ledger account balances for the postretirement benefit plan cost at December 31, 2015, which reflect the expected funded status of the plans before adjustment to reflect the plans' funded status based on the year-end measurements, and differences between the expected Medicare Part D subsidies and amounts received during the year. Willis Towers Watson used information supplied by LKE regarding postretirement benefit asset, postretirement liability and amounts recognized in accumulated other comprehensive income as of December 31, 2015. This data was reviewed for reasonableness and consistency, but no audit was performed.

Attachment #2 to Response to KIUC-1 Question No. 29 Page 15 of 24 Arbough

Accumulated other comprehensive (income)/loss amounts shown in this letter are shown prior to adjustment for deferred taxes. Any deferred tax effects in AOCI should be determined in consultation with LKE's tax advisors and auditors.

As required by U.S. GAAP, the actuarial assumptions and the accounting policies and methods employed in the development of the postretirement benefit cost and financial reporting have been selected by LKE. Willis Towers Watson has concurred with these assumptions and methods. ASC 715-30-35 requires that each significant assumption "individually represent the best estimate of a particular future event."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. The numbers shown in this report are not rounded, but this is for convenience and should not imply precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs reported in this valuation will likely increase in future valuations (and vice versa). Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from that anticipated by the economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the end of an amortization period), and changes in plan provisions or applicable law.

The information contained in this report was prepared for the internal use of LKE and its auditors in connection with our actuarial valuation of the postretirement benefit plan. It is neither intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. LKE may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require LKE to provide them this report, in which case LKE will use best efforts to notify Willis Towers Watson in advance of this distribution. Further distribution to, or use by, other parties of all or part of this document is expressly prohibited without Willis Towers Watson's prior written consent. Willis Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to other postretirement benefit plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Towers Watson Delaware Inc. * * * *

Please do not hesitate to call if you have any questions.

Sincerely,

Jerrifu a. Dellatetto

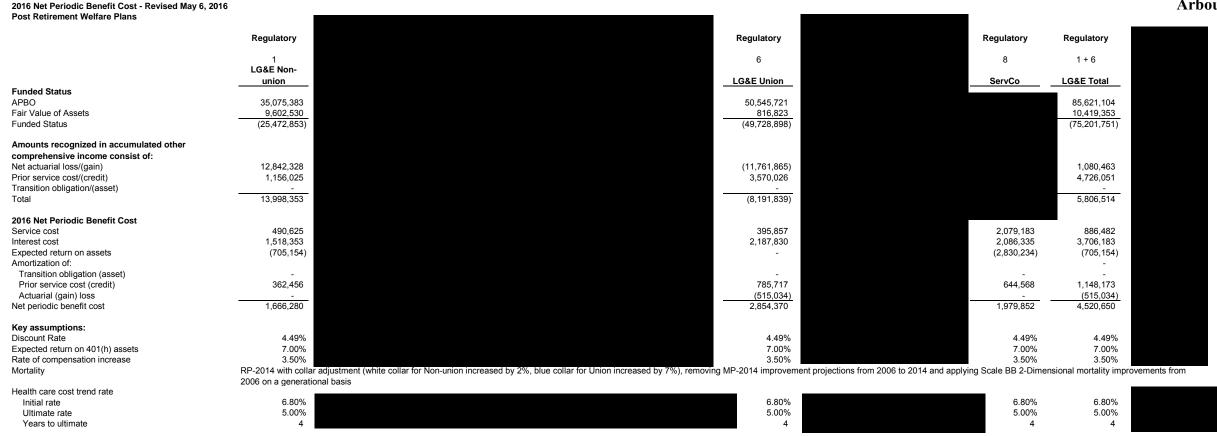
Jennifer A. Della Pietra, ASA, EA Senior Consulting Actuary Direct Dial: 215-246-6861

Kayre Kosoff

Royce S. Kosoff, FSA, EA, CFA Senior Consulting Actuary Direct Dial: 215-246-6815

cc: Dan Arbough – LG&E and KU Energy LLC Jeanne Kugler – LG&E and KU Energy LLC Kayla Coleman – LG&E and KU Energy LLC George Sunder – PPL Corporation Julissa Burgos – PPL Corporation Kristin May, FSA, EA – Willis Towers Watson Brad Dreisbach, ASA – Willis Towers Watson

Attachment #2 to Response to KIUC-1 Question No. 29 Page 17 of 24 Arbough



LG&E and KU Energy LLC ("LKE")

The results contained in this document are based on the individual participant data provided by Mercer and LKE as of January 1, 2016. 2016 per capita claim cost assumptions were provided by Mercer Health and Welfare actuaries. All other assumptions, methods, and plan provisions are the same as those used for the year-end 2015 financial statement disclosures provided on January 19, 2016. The descriptions of the assumptions, methods, plan provisions, and limitations as set forth in the year-end 2015 financial statement disclosure letter should be considered part of these results.



May 15, 2015

Ms. Kelli Higdon Senior Accounting Analyst LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202

Dear Kelli:

2015 ASC 715 ACCOUNTING RESULTS FOR THE POSTRETIREMENT BENEFIT PLAN

LG&E and KU Energy LLC ("LKE" or "the Company") engaged Towers Watson Delaware, Inc. ("Towers Watson") to determine the Net Periodic Benefit Cost/Income ("NPBC") for the LG&E and KU Energy Postretirement Benefit Plan, in accordance with FASB Accounting Standards Codification Topic 715 ("ASC 715") for the fiscal year beginning January 1, 2015. The exhibits that follow provide results for the plan, with allocations as requested by LKE.

Reconciliation to May 30, 2014 Budget Projections

The preliminary 2015 consolidated US GAAP NPBC for the postretirement benefit plan of \$11.1 million compares to the projected 2015 consolidated NPBC of \$11.6 million provided in our May 30, 2014 e-mail as follows:

	Consolidated US GAAP NPBC (in \$millions)
2015 Projected NPBC provided on May 30, 2014	\$11.6
Economic gains due to higher than expected asset returns	(1.0)
Demographic gains due to updated data compared to roll forward	(0.6)
Impact of assumption changes other than discount rate and mortality	0.8
Updated discount rate at December 31, 2014	0.1
Updated mortality assumption at December 31, 2014	0.0
Reflection of updated per capita claims data	(0.5)
Effect of plan changes, including RMA contributions and RMC credits	0.9
Impact of 401(h) contribution at 6/30/15	(0.2)
2015 Preliminary NPBC	\$11.1



Reconciliation to Actual 2014 NPBC

The preliminary 2015 consolidated U.S. GAAP NPBC for the postretirement benefit plan of \$11.1 million compares to the <u>actual 2014</u> consolidated NPBC of \$10.4 million as follows:

	Consolidated U.S. GAAP
	NPBC (in \$millions)
2014 Actual U.S. GAAP NPBC	\$10.4
Economic gains due to higher than expected asset returns	(0.9)
Demographic gains due to updated data	(1.0)
Impact of assumption changes other than discount rate and mortality	0.8
Discount rate change	0.6
Mortality assumption change	1.0
Reflection of updated per capita claims data	(0.5)
Effect of plan changes, including RMA contributions and RMC credits	0.9
Impact of 401(h) contribution at 6/30/15	(0.2)
2015 Preliminary U.S. GAAP NPBC	\$11.1

Please note the following regarding these results:

1. As of January 1, 2014, LG&E and KU Energy LLC has selected the following economic assumptions: Discount rate:

The discount rate of 4.06% is based on the results of the Towers Watson BOND:Link model. At December 31, 2014, cash flows by plan were used to develop individual discount rates. Further information regarding the BOND:Link model parameters chosen by LKE can be found in our e-mail correspondence from January 7, 2015.



Rate of compensation increase:

The January 1, 2015 rate of compensation increase assumption for the plan is a flat 3.50% at all ages. This amount decreased from the flat 4.00% assumption as of January 1, 2014 based on long-term expectations of salary increase rates for the covered plan populations.

Expected return on assets (EROA):

The January 1, 2015 EROA assumption for the plan is 7.00% for the 401(h) sub-account and 0.00% for the Union and Non-union VEBAs, which have historically been used as short-term payment vehicles.

Health care cost trend:

	December 31, 2014
2015	7.2%
2016	6.8%
2017	6.4%
2018	6.0%
2019	5.5%
2020+	5.0%

Per capita claims cost:

The per capita claims costs and employee contribution amounts for 2015 were provided by Mercer. We have reviewed the claims information for reasonableness and consistency, but have neither audited nor independently verified this information.

2. During 2014, LKE completed a demographic experience study to assess the appropriateness of the plans' current demographic assumptions. Details regarding the results of the study can be found in our 2014 Experience Study and Demographic Assumptions Review presentation provided to PPL and LKE on November 12, 2014. As a result of that study, the following demographic assumptions were refined to better reflect anticipated future demographic experience. All remaining demographic assumptions remain consistent with those selected by LKE at January 1, 2014. Detailed descriptions of all demographic assumptions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2015 (to be published during the coming months).

Age	January 1, 2015	January 1, 2014
55	3%	2%
56	3%	2%
57	4%	2%
58	5%	4%
59	10%	4%
60	20%	10%
61	20%	10%
62	35%	50%
63	25%	15%
64	25%	10%
65 - 67	50%	100%
68+	100%	100%

Retirement rates for active participants:



Termination:

For both the union and non-union populations, the termination assumption was updated to the SOA Hourly Union Termination Table.

Mortality:

For the non-bargained plans, the mortality assumption was updated to reflect the RP-2014 gender specific healthy employee and healthy annuitant mortality tables with white collar adjustment (removing MP-2014 improvement projections from 2006-2014), increased by 2%, and applying Scale BB 2-Dimensional mortality improvements from 2006 on a generational basis.

For bargained plans, the mortality assumption was updated to reflect the RP-2014 gender specific healthy employee and healthy annuitant mortality tables with blue collar adjustment (removing MP-2014 improvement projections from 2006-2014), increased by 7%, and applying Scale BB 2-Dimensional mortality improvements from 2006 on a generational basis.

The disabled mortality assumption was updated to reflect the RP-2014 "Disabled Retirees" table (removing MP-2014 improvement projections from 2006-2014) and applying Scale BB 2-Dimensional mortality improvements from 2006 on a generational basis.

3. All plan provisions are the same as those valued at January 1, 2014, with the following exceptions:

Retiree Medical Account (RMA)	 RMA contribution increased from \$2,000 to \$2,500 per year Maximum RMA account balance limit for retirees increased from \$30,000 to \$37,500 Corresponding increase for dependents (50% of RMA)
Retiree Medical Credit (RMC)	 For ages 55-62, RMC retiree credit increased from \$200/mo to \$210/mo For ages 62-65, RMC retiree credit increased from \$465/mo to \$500/mo For ages 65 and older, RMC retiree credit increased from \$200/mo to \$210/mo

Detailed descriptions of the plan provisions will be included in the actuarial valuation reports for the fiscal year ending December 31, 2015 (to be published during the coming months).

4. The expected contributions to the 401(h) sub-account are assumed to be contributed on June 30th, 2015 and, therefore, six months of expected return on assets is reflected. The expected contributions to the Union and Non-union VEBAs are assumed to be made monthly equal to the amounts paid out of the VEBA account each month.

401(h) Sub-account Contributions
\$ 0.81
\$ 3.35
,



5. Under PPACA, the Transitional Reinsurance Fee ("TRF") is scheduled to be collected from both selfinsured employer medical plans and fully insured medical plans beginning in 2014 and continuing through 2016 as a means to help stabilize premiums for coverage in the individual market (inside and outside the exchanges). Consistent with the prior year, the TRF will be accounted for outside of the plan, and therefore, the 2015 postretirement benefit obligations have not been adjusted to reflect the expected cost of the TRF.

Actuarial Certification

In preparing the results presented in this letter (including the attached exhibit), we have relied upon information regarding plan provisions, participants, assets and sponsor accounting policies and methods provided by LKE and other persons or organizations designated by LKE. We have relied on all the data and information provided as complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by LKE, may produce materially different results that could require that a revised report be issued.

The measurement date is January 1, 2015. The benefit obligations were measured as of January 1, 2015 and are based on participant data as of the census date, January 1, 2015.

Information about the fair value of plan assets was furnished to us by BNY Mellon. LKE also provided information about the general ledger account balances for the postretirement benefit plan cost at December 31, 2014, which reflect the expected funded status of the plans before adjustment to reflect the plans' funded status based on the year-end measurements, and differences between the expected Medicare Part D subsidies and amounts received during the year. Towers Watson used information supplied by LKE regarding postretirement benefit asset, postretirement liability and amounts recognized in accumulated other comprehensive income as of December 31, 2014. This data was reviewed for reasonableness and consistency, but no audit was performed.

Accumulated other comprehensive (income)/loss amounts shown in this letter are shown prior to adjustment for deferred taxes. Any deferred tax effects in AOCI should be determined in consultation with LKE's tax advisors and auditors.

As required by U.S. GAAP, the actuarial assumptions and the accounting policies and methods employed in the development of the postretirement benefit cost and financial reporting have been selected by LKE. Towers Watson has concurred with these assumptions and methods. ASC 715-30-35 requires that each significant assumption "individually represent the best estimate of a particular future event."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. The



numbers shown in this report are not rounded, but this is for convenience and should not imply precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs reported in this valuation will likely increase in future valuations (and vice versa). Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from that anticipated by the economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the end of an amortization period), and changes in plan provisions or applicable law.

The information contained in this report was prepared for the internal use of LKE and its auditors in connection with our actuarial valuation of the postretirement benefit plan. It is neither intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. LKE may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require LKE to provide them this report, in which case LKE will use best efforts to notify Towers Watson in advance of this distribution. Further distribution to, or use by, other parties of all or part of this document is expressly prohibited without Towers Watson's prior written consent. Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to other postretirement benefit plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Towers Watson Delaware Inc.

* * * *

Please do not hesitate to call if you have any questions.

Sincerely,

vufu a Della litto

Jennifer A. Della Pietra, ASA, EA Senior Consulting Actuary Direct Dial: 215-246-6861

William Lot

William R. Loth, FSA, EA Consulting Actuary Direct Dial: 215-246-6647

cc: George Sunder – PPL Corporation Dan Arbough – LG&E and KU Energy LLC Jeanne Kugler– LG&E and KU Energy LLC Julissa Burgos – PPL Corporation Kristin May, FSA, EA – Towers Watson Brad Dreisbach, ASA – Towers Watson

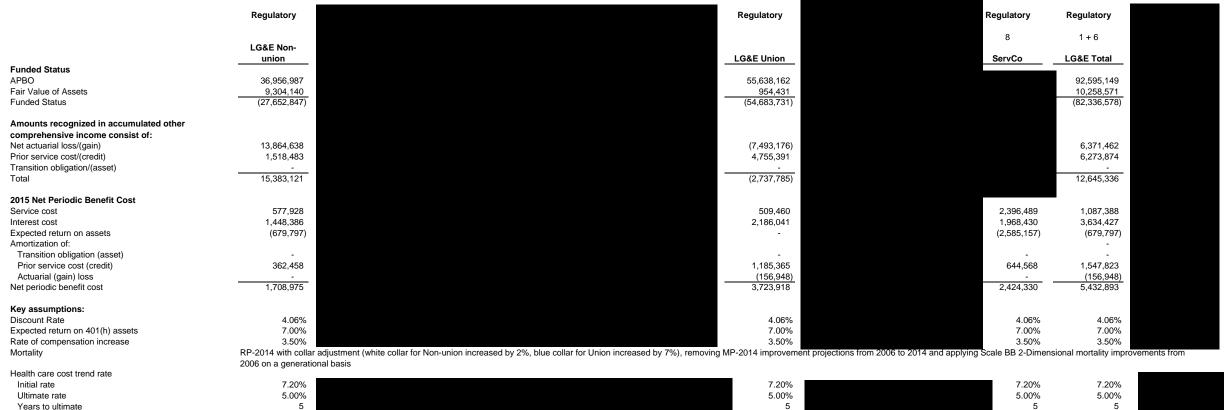
Kayre Kosof

Royce S. Kosoff, FSA, EA, CFA Senior Consulting Actuary Direct Dial: 215-246-6815

Attachment #2 to Response to KIUC-1 Question No. 29 Page 24 of 24 Arbough

LG&E and KU Energy LLC ("LKE")

2015 Net Periodic Benefit Cost - Revised to include additional retirees in the WKE Non-union results Post Retirement Welfare Plans



The results contained in this document are based on the individual participant data provided by Mercer and LKE as of January 1, 2015. 2015 per capita claim cost assumptions were provided by Mercer Health and Welfare actuaries. All other assumptions, methods, and plan provisions are the same as those used for the year-end 2014 financial statement disclosures provided on January 20, 2015. The descriptions of the assumptions, methods, plan provisions, and limitations as set forth in the year-end 2014 financial statement disclosure letter should be considered part of these results.

Assumptions	Те	st Year		
	7/1/2015-6/30/2016	7/1/2017-6/30/2018		
Mortality Assumption				
LG&E and KU Retirement Plan & LG&E Energy LLC Postretirement Benefit Plan	Fully generational RP-2014 mortality table with MP-2014 projection sca with white collar adjustment.	ale RP-2014 gender specific healthy employee and healthy annuita mortality tables with white collar adjustment (removing MP-20 improvement projections from 2006-2014), increased by 2%, an applying Scale BB 2-Dimensional mortality improvements from 2006 or generational basis.		
Louisville Gas and Electric Company Bargaining Employees' Retirement Plan	Fully generational RP-2014 mortality table with MP-2014 projection sca with no collar adjustment.	le RP-2014 gender specific healthy employee and healthy annuitant mortality tables with blue collar adjustment (removing MP-2014 improvement projections from 2006-2014), increased by 7%, and applying Scale BB 2-Dimensional mortality improvements from 2006 on a generational basis.		
Discount Rate				
LG&E and KU Retirement Plan	4.70%	4.42%		
Louisville Gas and Electric Company Bargaining				
Employees' Retirement Plan	4.63%	4.34%		
LG&E Energy LLC Postretirement Benefit Plan	4.41%	4.31%		
Rate of Compensation Increase	4.00%	3.50%		
Expected Return on Assets	7.00%	7.00%		
Health Care Cost Trend				
2015	7.20%	N/A		
2016	6.80%	N/A		
2017	6.40%	7.00%		
2018	6.00%	6.80%		
	No Lump Sum Option was available.	The percentage of retiring and terminating participants assumed to take a lump sum is 50%. Lump sum benefits are valued reflecting the discount		

Lump Sum Option

The percentage of retiring and terminating participants assumed to take a lump sum is 50%. Lump sum benefits are valued reflecting the discount rate employed for accounting purposes and unisex RP-2014 healthy annuitant mortality table (e.g., 50/50 blend of gender specific tables), without collar adjustment (removing MP-2014 improvement projections from 2006-2014) and applying Scale BB 2-Dimensional mortality improvements form 2006 on a generational basis.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 30

Responding Witness: Daniel K. Arbough

- Q.1-30. Please provide the Company's 2017, 2018, and 2019 pension and OPEB actuarial cost projections.
- A.1-30. See attachment #1 to the response to Question No. 29.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 31

Responding Witness: Lonnie E. Bellar

- Q.1-31. Refer to page 20, lines 18-21, of Mr. Garrett's Direct Testimony wherein he describes an annual increase of \$1.1 million in transmission maintenance of overhead lines resulting primarily from a move to a five-year cycle approach from a just-in time approach.
 - a. Please provide copies of all studies and/or analyses relied upon to justify the change in methodology and the amount of the annual increase.
 - b. Please quantify the expected annual benefits resulting in reduced outage maintenance expense as the result of moving to the cycle approach. If none, then please explain why.
 - c. Please confirm that the change to a five-year cycle approach from a just-in time approach should be expense neutral or result in a savings due to more efficient trimming aside from any savings in outage maintenance expense. If this cannot be confirmed, then please provide a detailed explanation why this is not correct.

A.1-31.

- a. See attached.
- b. Conversion to a cycle based approach and implementation of a hazard tree identification and removal program as part of transmission vegetation management is expected to primarily provide reliability benefits to customers. The full benefit of these programs will not be realized until after conversion to the five-year maintenance cycle and completion of the first cycle of the hazard tree program. The Company expects some reduction in outage maintenance expense, but has not quantified the reduction.
- c. The referenced increases include the cost to convert to a five year maintenance cycle and implementation of a new hazard tree identification

and removal program which are expected to reduce tree related customer outages but may not be expense neutral. The Company did not specifically perform detailed analysis to determine O&M costs beyond the conversion timeframe.



Louisville Gas & Electric and Kentucky Utilities Transmission Program Review

Prepared for Louisville Gas & Electric Kentucky Utilities Lexington, KY

February 20, 2015

Prepared by ECI 520 Business Park Circle Stoughton, WI 53589

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Executive Summary At the request of Louisville Gas & Electric (LG&E) and Kentucky Utilities (KU), ECI has completed the survey of transmission rights-of-way and a review of the vegetation management program. The primary goal of the evaluation was to assess the vegetation workload on the LG&E and KU overhead transmission and develop a budget to support the vegetation management program. A secondary goal was to conduct a high-level assessment of the vegetation management program and identify general opportunities to enhance program management, reliability and cost effectiveness.

The workload survey was performed while accompanying LG&E and KU during fourth quarter aerial inspection. ECI's program assessment consisted of a review of available program documentation provided by LG&E and KU and interviews with key personnel involved with the program. The survey and program review was a cooperative effort between LG&E, KU and ECI.

On the basis of ECI's review, program strengths and opportunities for improvement were identified. Recommendations, based on the results of the review, ECI's experience, and industry best practices, have been developed to provide LG&E and KU with a general plan for program improvement.

Key Metrics Vegetation conditions were sampled on approximately 18 percent of the total transmission line miles while the ECI survey team accompanied LG&E and KU during regularly scheduled aerial inspections. ECI survey teams inventoried approximately 1,076 transmission miles. The field data collected was used to estimate the total transmission system vegetation workload, maintenance budget and resource requirements. Table 1 presents a system summary of these results.

 Table 1.
 Tree and Brush Workload Summary on the LG&E and KU Transmission System.

Voltage (kV)	System Miles	Yard Trees	Edge Pruning – Mechanica l (ft.)	Edge Pruning – Manual (ft.)	Re-Clear (ft.)	Manageable Brush Acres	¹ Total System Cost (Millions)
69	2,570	10,400	6,602,600	1,826,300	26,900	16,900	\$23.16
138	1,264	4,000	4,154,200	254,500	5,000	8,700	\$10.62
161	667	400	2,636,700	887,400	10,500	6,800	\$9.35
345	1,090	1,400	2,945,400	395,700		7,100	\$8.30
500	237		224,600	1,019,600	5,400	3,000	\$4.91
System:	5,827	16,200	16,563,500	4,383,500	47,800	42,500	\$56.32

¹ Reflects the cost to maintain the entire system. The exact cycle length to distribute the cost will need to be determined by LG&E and KU.

General Assessment

STRENGTHS Key strengths of the current LG&E and KU vegetation maintenance program include the following:

- LG&E and KU management is supportive of program improvements.
- The program is focused on reliability and regulatory compliance.
- A centralized management structure is in place.
- Right-of-way (ROW) conditions are inspected on a quarterly basis.
- 'Action Threshold Clearance' has been established to ensure minimum acceptable clearances are not encroached upon, providing increased margin of safety regarding reliability.
- Tree-caused outages are formally investigated and document, with trained personnel.
- Aerial herbicide applications are effectively used to control brush in rural ROW areas.

Recommendation ECI recommends the following program specific items based on the field data collection and observations of current vegetation practices on the LG&E and KU transmission system:

- 1. Transition maintenance program to cyclical maintenance.
- 2. Continue to remove incompatible trees within the ROW and particularly under the conductors (within the wire zone corridor).
- 3. Determine and document the ROW width for all LG&E and KU transmission circuits.
- 4. Develop a hazard tree² ground patrol to address potential risk from trees that may not be visible through normal routine aerial inspections.
- 5. Establish a list or database of hazard tree locations and develop a priority program to determine which trees should be removed first. This database may include ash trees that could be affected by the emerald ash borer (EAB).
- 6. Continue to enforce vegetation maintenance clearance specifications for transmission voltages and the policies and standards specific to LG&E and KU needs and conditions. Current specifications appear adequate to maintain vegetation on the transmission system.
- 7. Ensure that vegetation maintenance crews exhibit reasonable production levels by implementing a work reporting / measurement system and utilize the records to evaluate crews and compare contractor performance.
- 8. Implement Integrated Vegetation Management (IVM³) as the guiding maintenance principle on the LG&E and KU transmission system.

 2 Danger trees are trees tall enough to breach action threshold if they fell toward lines regardless of condition.

- 9. Re-establish the transmission corridor ROW edges wherever practical to bring the corridors back to specification by voltage.
- 10. Continue to maximize herbicide use where practical to minimize future vegetation management costs and better manage for compatible plant communities.
- 11. Once established maintain consistent transmission vegetation maintenance program funding to maximize overall program effectiveness and ensure compliance with NERC Standards FAC-003.
- 12. Consider increasing vegetation management oversight to address the addition of approximately 46 crews to meet workload requirement for a 5-year cycle (Appendix D).

³ IVM = A system of managing plant communities in which compatible and incompatible vegetation is identified, action thresholds are considered, control methods are evaluated, and selected control(s) are implemented to achieve a specific objective. Choice of control methods is based on effectiveness, environmental impact, site characteristics, safety, security and economics. *ANSI A300 (part 7)-2012 IVM*.

- **Introduction** At the request of LG&E and KU, ECI has documented the quantity and characteristics of the existing tree and brush workload that currently exists on the transmission system. In preparation for the survey:
 - LG&E and KU supplied GPS transmission structure locations, flight schedule and helicopter for the vegetation survey, which included the states of Indiana, Kentucky, and Virginia.
 - ECI provided the methodology, field personnel, and expertise necessary to conduct the study.

The fieldwork consisted of a sample survey of vegetation conditions that resulted in 18 percent (1,076 miles) of the transmission line miles throughout the service areas of two Pennsylvania Power and Light Corporation operating companies (OPCOs). These OPCOs are LG&E and KU. LG&E and KU supply power to 98 counties with combined total of approximately 1.3 million customers. The aerial survey occurred between October 20 and November 21, 2014. All data was collected on a span-by-span basis. Aerial data collection included: brush maintenance recommendations (mow, hand cut, foliar spray), edge tree maintenance workload, accessibility, and notations on danger⁴ and hazard⁵⁶ trees adjacent to the ROW corridor (dead, dying, severe lean toward line, etc.). This report includes the following areas of evaluation:

- 1. Evaluation of field conditions designed to quantify the extent of maintenance required and recommended maintenance practices.
- 2. Evaluation of vegetation management practices and effectiveness compared to industry best practice methods.

Through phone interview and via email questionnaires, the current operation procedures and vegetation management practices were discussed with LG&E and KU staff.

Coordinate present during the flight.

⁴ Danger tree: any tree that could contact the conductor if it fell or fall within the action threshold.

⁵ Hazard tree: a danger tree predisposed to failure due to disease, structure, dead or in decline, lean or soil conditions.
⁶ The six hazard trees observed during the aerial workload survey were reported to the LG&E and KU ROW

Current Operating Practices

This section presents general findings of ECI's interview with LG&E and KU staff and the program information (i.e., historical budget, reliability, staffing level, etc.). On the basis of ECI's review, program strengths and opportunities for improvement were identified. Recommendations, based on the results of the review, ECI's experience, and industry best practices, have been developed to provide LG&E and KU with a general plan for program improvement.

Program Management and Supervision

LG&E and KU has a centralized staff that manages vegetation on the system. Supervision over the vegetation management group has recently changed to the Transmission Line Construction department. The overall transmission vegetation management program goals are based on safety, reliability, cost effectiveness, fire safety and utilizing industry best management practices. LG&E and KU does have a comprehensive vegetation management plan and clearance specifications; however, does not manage a specific cycle. Currently, there are three ROW Coordinators who are each assigned to a specific region (East, Central and West) to manage.

Vegetation maintenance needs are determined by LG&E and KU ROW Coordinators based upon quarterly inspections performed. The patrol of transmission lines is predominately performed by helicopter. The ROW Coordinators and other experienced staff have received training on recognizing vegetation maintenance priorities or conditions that require immediate attention.

Contract Crews ROW Coordinators oversee vegetation maintenance performed by three vendors under a T&M contract. Asplundh Tree Expert, Co. and Phillips Tree Experts, Inc. are tree contractors used for vegetation maintenance from the ground. LG&E and KU are contracted with Summit Helicopters, Inc. to perform herbicide aerial spray treatments. Haverfield Aviation, Inc. was contracted to provide a helicopter for quarterly aerial inspection of the transmission lines.

Asplundh Tree Expert, Co. and Phillips Tree Experts, Inc. have signed a 5year contract with LG&E and KU. The maintenance from the ground is equally split between the two contractors. Phillips Tree Experts, Inc. works in the eastern half of the transmission system where the terrain is stepper because of the rolling foothills and mountain ridges common to the Appalachian Mountain Range.

Customer Interface LG&E and KU provide notification to land owners regarding maintenance activities based upon the location of the transmission line within the state. Customers abutting rural sections of transmission line typically do not receive notification in the eastern half of Kentucky. Landowners of agricultural land and horse farms and those located in urban area generally receive notifications. Special notification and access permission to ROW is provided when working on USDA Forest Service lands, military bases (Fort Knox) and other government owned land.

During a recent peer review project, LG&E and KU explained that land owner issues, skips, special areas were not tracked in any database. However, LG&E and KU informed ECI during an interview on August 20, 2014 that a spreadsheet to capture this information was being developed. Tracking customer issues or special previsions can help with reliability improvements, work planning, cycle selection, and tracking resolution status of refusals.

LG&E and KU follow the Kentucky Public Service Commission regulation Regulatory Agencies pertaining to tree energized electrical equipment limits of approach. If these limits are breached by tree(s), lines are de-energized to perform vegetation maintenance. LG&E and KU have guidelines to determine immediate maintenance requirements (emergency or high priority due to vegetation proximity) vs. scheduled maintenance. LG&E and KU are subject to North American Electric Reliability Corporation (NERC) reliability standards and must practice due diligence in complying with NERC FAC-003 standards. LG&E and KU transmission system are specifically regulated by SERC Reliability Corporation, a regional entity of NERC. LG&E and KU have 1,327 miles of NERC lines (345 and 500kV system) and 4,500 miles of non-NERC lines (69, 138 and 161 kV system). LIDAR is performed on 50 percent of the NERC lines each year. Even though NERC FAC 003-3⁷ standards require only one inspection per calendar year of vegetation conditions, LG&E and KU performs two vegetation only patrols during May and July. In addition, while LG&E and KU perform aerial patrols each quarter for critical visual inspection, the ROW Coordinator will document any vegetation that may have been missed during the vegetation only patrols in May and July.

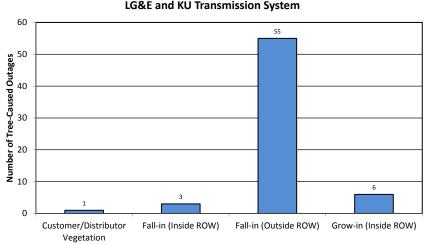
Tree-Related Interruptions

LG&E and KU reliability staff perform an in-depth post-outage investigation of vegetation-caused outages. Outages listed as "vegetation" are separated by a secondary cause code (i.e., grow-in, fall-in from off-ROW, and fall-in from inside-ROW). The specific reason for a tree-caused outage is limited to three codes, but could be expanded to include additional cause codes for further reliability improvement. The additional secondary cause codes (i.e., hazard tree, mode of tree failure, etc.) would assist in further diagnosis of tree-caused outages.

A major concern for LG&E and KU are: hazard and danger trees – risk of fallin from on and off ROW trees (117 fall-ins on 69, 138 and 161kV lines between 2008 and 2014). The all tree-caused interruptions are on non-NERC

⁷ Each applicable Transmission Owner and applicable Generator Owner shall perform a Vegetation Inspection of 100% of its applicable transmission lines (measured in units of choice – circuit, pole line, line miles of kilometers, etc.) at least once per calendar year and with no more than 18 calendar months between inspections on the same ROW. FAC 003-3 R6. 2013

transmission lines due to on and off-ROW trees falling into the ROW. LG&E and KU have very few "grow-in" outages on the 69kV and higher voltage lines. No "grows-in" have been recorded on 345 and 500kV lines between 2008 and 2014. Before 2012 the secondary cause code was limited to fall-in within in the ROW. The interruption may have resulted from a tree outside of the ROW but cause was classified as fall-in from inside the ROW. The secondary cause codes were expanded in 2012 to allow for the distinction between fall-ins for inside or outside of the ROW and grow-ins. Figure 1 shows the number of tree-caused outages between 2012 and 2014 for each of the secondary cause codes. Tree fall-ins, outside of the ROW, account for 85 percent of the tree-caused outages between 2012 and 2014.



Total Number Tree-Caused Outages Between 2012 and 2014 on the LG&E and KU Transmission System

Figure 1. Total number tree-caused outages by secondary caused.

Hazard trees are removed as they are found. However, since LG&E and KU have had 117 fall-ins over the course of 7 years there appears to be hazard trees that are possibly being missed during aerial inspections. A ground patrol may be warranted to identify hazard trees that are hidden under the canopy of larger mature trees.

Recordkeeping and Crew Productivity A comprehensive recordkeeping and reporting system is an essential component of an effective line clearance program. A record keeping system should be capable of providing management with the following information:

- Justification of management decisions.
- Projections of annual budget requirements.
- Determination of the most cost effective crew type for various locations and work types.
- Prioritizing work by analysis of tree-caused outages and the inclusion of other metrics important to the utility.
- Detailed monitoring of crew productivity.

- Establishment of guidelines for tree removal and replacement (if implemented).
- Establishing a tracking process for customer refusals and hazard trees.

A comprehensive line clearance record keeping system depends on recording four components of all field activities: work location (i.e. circuit number), description of work completed (number of trims, removals, etc.), time required to complete the activity and any required materials (man and equipment hours). Time report verification, evaluation of crew productivity and accumulation of cost and production data all depend on these elements of activity reporting.

Recording crew time by specific work units and work related activities will provide the means to (1) examine detailed costs, (2) evaluate productivity, and (3) initiate appropriate changes to maximize the efficiency of the program. All record keeping needs to be adjusted to conform to the type of contract in place and the desired system metrics LG&E and KU desires.

Time Utilization

Time utilization measures can be used to evaluate crew time and production figures: time utilization, performance, and effectiveness.

Time utilization calculations allow a utility to determine what each crew does with the time it controls on a daily basis. For example, if time utilization is low, it indicates that the crew has excessive nonproductive time.

Performance

Performance is a measure that compares the actual time required to prune or remove a tree to the expected or standard time. Standards are developed from actual local data and are periodically evaluated for accuracy. The performance rating provides a good means for evaluating the production rates of each crew relative to an established set of standards. If performance is too high, it may suggest that a crew is inaccurately reporting work, obtaining inadequate clearance, or trimming brush (rather than removing brush). If performance is too low, it may suggest that the need for increased supervision and/or training.

Effectiveness

Effectiveness is calculated as a product of time utilization and performance (time utilization X performance/100). It provides a relative measure of what the return on expenditures is for each contract crew. Effectiveness ratings can be used to compare individual crews.

LG&E and KU has an electronic record keeping system to track circuit history, crew number, man hours, start and stop pole locations, labor cost, material cost, equipment cost, aerial spray acres and aerial spray cost. Even though their record keeping system tracks this information, the detail is limited and prevents any crew production analysis. The start/stop pole information does not include a linear distance and type of work performed (i.e., number of trims, linear distance mechanically pruned, removal, brush acres mowed, etc.). While LG&E and KU record the crew number for all work performed, the number of men or type of equipped used by the crew is not included. Once the electronic record keeping system is expanded to include this additional information, LG&E and KU can establish production metrics to track the efficiency of the vegetation maintenance program (i.e., cost per acre, cost per mile, etc.).

LG&E and KU does not currently possess the metrics necessary to effectively and efficiently manage the program. Data is collected from contractor invoices regarding total cost and man-hours only and are not tracked by individual work unit even though this type of information is available. The data contractor invoice does include information regarding number of units maintained or miles covered. Work is categorized on the LG&E and KUrequired timesheet by the following classifications:

- Man-hours for each employee and equipment
 - Daily Hours (RT, OT, and DT)
 - o Holiday
 - Vacation
 - o Other
- Type of Work
- Type of Billing (T&M, Cost Plus, Unit, and Contract)
- Type of Crew (Tree or Other)
- Project number or account number (i.e. distribution, new construction)
- Herbicide Concentrate
 - Amount by unit (lbs or gallons)
- Tree Units and Man-hours by Unit
- Brush Units and Man-hours by Unit

Unit data (i.e. number of trees by maintenance type) is recorded on the timesheet but not captured as part of the current process for the electronic record keeping system. Additional details about contractor production would allow movement toward a performance-based component within a T&M contract, or become a basis for a unit cost removal component of firm priced

contracts (Appendix A). At a minimum, more detailed production data would provide an accurate assessment of production cost for various work-types for both internal and external comparisons.

Both record keeping software and record keeping services are available to provide streamlined invoice verification, cost tracking by asset and work type, metrics for process improvement and documentation of work accomplishment.

Vegetation Work Practices

LG&E and KU are doing an admirable job in managing transmission vegetation with a limited budget. The size of the annual budget has necessitated a "just-in-time" approach to vegetation maintenance. The current maintenance practice of "just in time" or "hot spot" mowing, herbicide treatment, edge pruning on non-NERC lines has resulted in a system that is a patch work of various vegetation conditions on the ROW's. Vegetation conditions on any given line range from clear (just maintained) to very tall brush or edge trees on low voltage lines requiring immediate attention. This can result in excessive "jumping" from location to location by the contractor, thus incurring additional travel time. The limited detail in the records regarding maintenance cost preclude developing a line maintenance history, determining the efficiency of the vendor and over-all lack of data to forecast future work effort and cost.

Through ECI's aerial patrols, the vegetation workload was quantified, and utilizing LG&E and KU historical maintenance cost and available supplemental industry cost data, a maintenance budget has been established. Because maintenance has been on a "hot spot" basis, conversion to a more efficient and cost effective cyclic maintenance schedule will require several years to implement. During this implementation phase, "hot spot" maintenance will be required to maintain system reliability until cycles can be established. In addition, the early years of the conversion to cyclic maintenance may require a higher budget. Converting to a cyclic maintenance schedule will reduce unit production cost (lower density and shorter height brush), provide for reduced planning effort each year through reducing the number aerial inspections and provide for a sound basis to consider other contracting strategies.

Vegetation Maintenance Expenditures

The vegetation maintenance budget is presented to LG&E and KU senior management on an annual basis for approval. Budgets have been based on historical levels, not specifically to address cyclic maintenance requirements. The annual budget has remained fairly flat over the past 6 years (Table 2).

Year	ROW Actuals	CPI ⁸ – 2014 ⁹
2009	\$4,425,830.31	\$4,883,788.64
2010	\$4,616,948.52	\$5,012,464.34
2011	\$5,313,879.93	\$5,592,568.11
2012	\$4,912,862.53	\$5,065,687.36
2013	\$5,570,389.98	\$5,660,752.17
2014	\$6,151,060.19 ¹⁰	\$6,151,060.19

 Table 2.
 LG&E and KU Historical Transmission Vegetation Maintenance

 Expenditures.

Production and Cost LG&E and KU provided ECI with the electronic record keeping system for records from 2010 through 2014. From these records, ECI calculated aerial spray cost per acre. In addition, LG&E and KU provided ECI with weekly rates by crew type for calculating the estimated number crews need to manage the transmission system. LG&E and KU may choose to re-calculate the budget by changing some of the brush acres classified as low and high-volume foliar treatments to aerial spray treatments.

Vegetation Assessment Vegetation conditions were sampled on 18 percent of the total transmission line miles to estimate the existing vegetation workload for each of the five voltages. ECI survey teams inventoried approximately 1,076 transmission miles. Field data gathered by the survey teams focused on tree and brush quantities, conditions, and maintenance requirements. The results of the study are included in the following sections.

Specific Survey
CriterionECI's survey teams utilized the Louisville Gas & Electric and Kentucky
Utilities Services Company Transmission Vegetation Management Program
(Revision 2013) as the basis for determining current and future vegetation
work load. The survey teams collected data on the vegetation conditions on
the LG&E and KU transmission system using the form found in Appendix B.

⁸ CPI – Consumer Price Index.

⁹ The actual vegetation expenses for each year were adjusted using the correct CPI and the base year of 2014. The adjustment was down to allow for a better comparison between years.

¹⁰ Actual vegetation expense through the end of November.

Vegetation	This section presents general findings of ECI's workload assessment. Total
Workload Survey Data	workload projections are based on the total line miles as provided by LG&E and KU.

Total Workload Table 3 represents the estimated total vegetation workload summary for the LG&E and KU transmission system by voltage class based on the sample survey.

Voltage	System Miles	System Acres	Yard Trees	Edge Pruning - Mechanical (ft.)	Edge Pruning - Manual (ft.)	Re-clear (ft.)	Manageable Brush Acres
69	2,570	46,723	10,400	6,602,600	1,826,300	26,900	16,900
138	1,264	22,973	4,000	4,154,200	254,500	5,000	8,700
161	667	12,119	400	2,636,700	887,400	10,500	6,800
345	1,090	19,822	1,400	2,945,400	395,700		7,100
500	237	4,313		224,600	1,019,600	5,400	3,000
TOTAL	5,827	105,949	16,200	16,563,500	4,383,500	47,800	42,500

 Table 3.
 Tree and Brush Workload by Voltage Category (Transmission).

Total projected workload was projected for the LG&E and KU system based upon the conditions noted on the sampled miles. Table 2 indicates that approximately 16,563,500 linear feet (actual footage to be pruned not line footage) of ROW edge can be pruned using mechanical equipment (i.e. Jarraff or Skytrim crews), 4,383,500 feet consist of manual workload and 47,800 feet of ROW edge needs to be re-cleared to the establish ROW width. The estimated linear footage of ROW needing to be re-cleared was minimal because the ECI survey team counted work that had encroached from the established ROW width and not the actual easement width. LG&E and KU could not provide ECI the actual ROW easement or edge-to-edge width for each circuit. The small amount of estimated re-clear footage for 500kV lines resulted from the need to achieve additional clearance when a span of line extended from one ridge top to another.

More than 59 percent of the ROW edge workload was found on 138, 161, 345 and 500 kV lines which is expected considering these four voltages comprise approximately 55 percent of the total transmission line miles. Figure 2 shows the distribution of edge tree maintenance workload across the varying voltage classifications. Alternatively, Figure 3 presents the linear distance of edge tree maintenance on a per mile basis, which shows 161kV lines as having the highest concentration, followed by 500kV and 138kV lines.

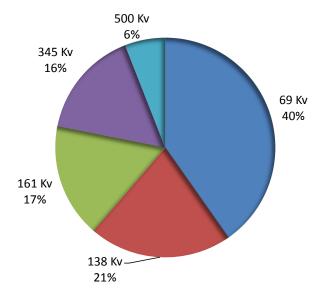


Figure 2. Percentage of Edge Tree Maintenance Workload by Voltage Classification.

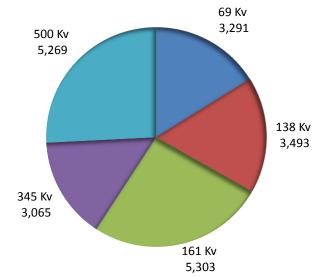


Figure 3. Linear Distance of Edge Tree Maintenance per Mile by Voltage Classification¹¹.

Yard trees account for approximately 16,200 total trees or 2.7 trees per mile at the system level. ECI estimates there are approximately 105,950 acres that comprise the entire LG&E and KU transmission system. Of those total acres, approximately 40 percent (or 42,500 acres) contain manageable brush acreage. Brush will be defined in greater detail later in the Brush Workload Characteristics section.

Average Density and Statistical Error

Tree and brush density was quantified in terms of trees per mile, linear distance per mile and acres per mile. Table 4 shows the average trees per mile (Yard Trees), linear distance per mile of ROW edge trimming (Mechanical, Manual and Re-clear), and brush acres per mile by voltage class on the LG&E and KU transmission system. These are trees and acres of brush requiring maintenance according to *Louisville Gas & Electric and Kentucky Utilities Services Company Transmission Vegetation Management Program (Revision 2013).* The tree counts and brush acres per mile values as expressed in Table 4 were used to estimate the total quantities at the system level (as shown in Table 3).

¹¹ Each side of the ROW was counted separately and then combined to provide actual footage to be pruned. Therefore, the liner footage per mile of workload can result in a number larger than a mile.

Voltage	Total System Miles	Number of Yard Trees	Linear Distance for Mechanical Trimming (ft.)	Linear Distance for Manual Trimming (ft.)	Linear Distance for Re-clear of ROW (ft.)	Manageable Brush Acres
69	2,570	4.0	2569.4	710.7	10.5	6.6
138	1,264	3.2	3287.8	201.4	4.0	6.9
161	667	0.6	3955.6	1331.3	15.7	10.1
345	1,090	1.3	2701.7	363.0	0.0	6.5
500	237	0.0	946.9	4298.6	23.0	12.5
SYSTEM						
AVERAGE	5,827	2.7	2918.8	692.8	7.8	7.3

Table 4. Average per mile tree and brush densities per mile on the LG&E and KU transmission system.

The statistical sampling error was calculated for the transmission survey samples by voltage class. Statistical sampling error calculation was based upon the mean linear distance of tree workload and brush acreage per span at the 90 percent level of confidence. Sampling error for linear distance of tree workload per span for each voltage category were: $69kV = \pm 3$ percent; $138kV = \pm 4$ percent; $161kV = \pm 4$ percent; $345kV = \pm 5$ percent; and $500kV = \pm 11$ percent. Sampling error for brush acres per span for each voltage category were: $69kV = \pm 4$ percent; $161kV = \pm 4$ percent; $138kV = \pm 4$ percent; $161kV = \pm 4$ percent; $138kV = \pm 4$ percent; $161kV = \pm 4$ percent; $138kV = \pm 4$ percent; $161kV = \pm 4$ percent; $345kV = \pm 4$ percent; $and 500kV = \pm 7$ percent.

Brush Workload Characteristics

Brush workload was collected and characterized by maintenance practice. Table 5 shows the total estimated brush acres on the LG&E and KU system by maintenance practice.

 Table 5.
 Brush Workload by Voltage Category and Maintenance Practice.

Voltage	Total System Miles	Total System Acres	Mow Acres	Hand Cut and Treat Acres	Low- Volume Foliar Acres	High- Volume Foliar Acres	Manageable Brush Acres
69	2,570	46,723	1,100	1,500	13,500	800	16,900
138	1,264	22,973	1,100	800	6,300	500	8,700
161	667	12,119	500	500	5,500	300	6,800
345	1,090	19,822	500	500	5,300	800	7,100
500	237	4,314	100	100	900	1,900	3,000
TOTAL	5,827	105,950	3,300	3,400	31,500	4,300	42,500

Of the 105,950 total system acres identified on the LG&E and KU transmission system, approximately 40 percent (or 42,500 acres) currently

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contain brush species (Figure 4). When estimating brush acres, locations that had the potential to support brush were included in the in low-volume foliar management practice. The remaining 60 percent (or 63,450 acres) (Figure 5) are currently void of brush due to land use (e.g., agricultural land, maintained lawns, waterways, etc.).

Approximately 74 percent of the total manageable transmission brush acres were classified suitable for the maintenance practice of low-volume foliar treatment (i.e., backpack application of herbicide). For a location to be classified as low-volume foliar the stem heights were shorter than seven feet and stem density was approximately 1,500 or less per acre. Therefore, a large majority of the LG&E and KU transmission system is potentially manageable through low-volume herbicide maintenance work.

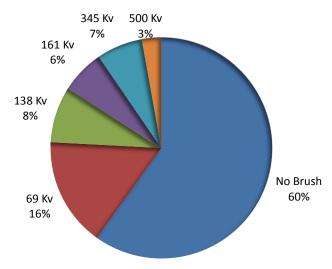


Figure 4. Percentage of Brush Acreage by Voltage Classification.

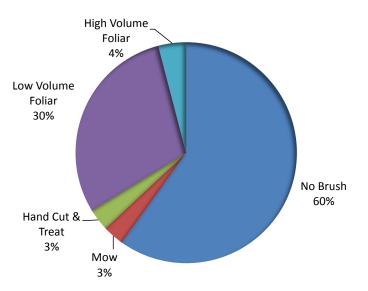


Figure 5. Percentage of Brush Acreage by Maintenance Practice.

Since the manageable brush acres on LG&E and KU transmission system was comprised of approximately 84 percent brush acres in the low and highvolume foliar treatment category, aerial treatments can be performed in an extremely cost effective manner using herbicides (where practical).

ROW Edge Clearing Characteristics

ECI documented specific transmission spans that fell short of the established ROW width. Table 2 presents the estimated linear feet of edge clearing required to reclaim existing overgrown rights-of-way to the established ROW edge. The tree and immature tree categories were deemed important in understanding the nature of the widening or re-clearing requirements, particularly since each may yield different clearing costs. Immature trees that could be cleared with a bush hog or hydro-axe were classified as mow acres. When clearing large trees required equipment such as a bull dozer or feller buncher then the work was classified as re-clear footage. Figure 6 shows examples of the specialized equipment commonly used for ROW clearing.







Hydro-Axe



Figure 6. Specialized Equipment Commonly Used in Transmission ROW Clearing and Widening.

The 47,800 feet of ROW edge identified as requiring re-clearing back to the established ROW edge, comprised of less than one percent of the total linear distance requiring some form of tree maintenance.

Maintenance Characteristics As part of the field data collection, the ECI surveyors classified the workload within each span into eight maintenance categories. Accessibility was also recorded for each span for the purpose to estimate potential workload that would be ideal for aerial saw trimming. ECI estimated that for 17 percent of the workload, aerial saw trimming may be a suitable means to maintain the edge of the ROW. The categories used for classifying the workload are:

- MST Mechanical side Trim (sky trim, Jarraff, etc)
- MT manual trim
- RC re-clear
- YT yard tree
- MBH mow: brush hog or hydro Ax (kershaw or similar)
- HC hand cutting
- LVF low-volume foliar herbicide treatment
- HVF high-volume foliar herbicide treatment

Dependent upon the location a span may have work that was separated into different categories. For example, due to terrain a span may have a mixture of mechanical and manual side trimming work. It should also be noted that the total brush acres to be maintained over a five-year cycle would be higher than total brush acres observed on the system because some brush acres mechanically cut or hand cut should have a subsequent follow-up herbicide application scheduled in a future year (currently two years).

Recommendations were assigned based on current field conditions with emphasis on minimizing maintenance costs. In most cases, herbicide was recommended in lieu of mowing unless specific site conditions warranted otherwise. However, specific herbicide restrictions may negate some herbicide recommendations. The data provided here has not been adjusted to balance the annual spend.

Note that these recommendations serve only as an estimate of the workload by maintenance practice. Prior to beginning any work or budgeting for specific vegetation needs, it is recommended that the specific transmission lines to be worked be individually prescribed. This data serves only to characterize the existing workload.

Budget and Man-Hour Estimates

Total vegetation management estimated costs and man-hours for the LG&E and KU transmission system are presented in Table 6. The detail in Table 7 presents the system total cost to maintain the tree and brush workload by management category and voltage on the LG&E and KU transmission system. Unit costs and weekly crew rates were used to calculate loaded labor and equipment rates (Table 8). The unit cost values were derived by ECI utilizing available industry data.

Table 6. Total Transmission Budget and Man-Hour Estimate By Voltage.

	Estimated Total	Estimated Total
Voltage	Cost	Man Hours
69	\$23,158,000	716,800
138	\$10,616,000	316,000
161	\$9,345,000	289,500
345	\$8,295,000	269,700
500	\$4,908,000	231,400
Grand Total	\$56,322,000	1,823,200

 Table 7.
 Total Budget by Management Category and Voltage for the LG&E and KU Transmission System.

	Yard			Re-			Low- Volume	High- Volume
Voltage	Trees	Mechanical	Manual	Clear	Mow	Hand Cut	Foliar	Foliar
69	\$780,000	\$7,923,000	\$5,844,000	\$148,000	\$556,000	\$2,850,000	\$4,725,000	\$332,000
138	\$300,000	\$4,985,000	\$814,000	\$28,000	\$556,000	\$1,520,000	\$2,205,000	\$208,000
161	\$30,000	\$3,164,000	\$2,840,000	\$58,000	\$253,000	\$950,000	\$1,925,000	\$125,000
345	\$105,000	\$3,534,000	\$1,266,000		\$253,000	\$950,000	\$1,855,000	\$332,000
500		\$270,000	\$3,263,000	\$30,000	\$51,000	\$190,000	\$315,000	\$789,000
Total	\$1,215,000	\$19,876,000	\$14,027,000	\$263,000	\$1,667,000	\$6,460,000	\$11,025,000	\$1,785,000

Table 8. Unit Cost and LLER

Management Category	Unit Cost	Unit	LLER
Yard Tree	\$75.00	per tree	\$31.48
Mechanical	\$1.20	per foot	\$41.05
Manual	\$3.20	per foot	\$29.47
Re-Clear	\$5.50	per foot	\$82.58
Mow	\$505.00	per acre	\$57.22
Hand Cut and Treat	\$1,900.00	per acre	\$32.22
Low-Volume Foliar	\$350.00	per acre	\$29.49
High-Volume Foliar	\$415.00	per acre	\$50.61
Aerial Spray	\$297.00	per acre	

Total budget to maintain the LG&E and KU transmission system for a targeted five-year cycle is estimated to be approximately \$56.32 million (or

approximately \$11.26M annually) and requires approximately 1.82 million man-hours (or 364,640 man-hours annually). The average system cost per transmission mile based on the estimated budget is \$9,665 per mile or roughly \$532 per system acre. Approximately 20 percent of the total budget dollars are allocated to low-volume herbicide work (LVF). Yard trees account for another two percent and incompatible ROW trees less than one percent. The three maintenance types (mechanical side trim, manual trim, and re-clear) for which industry unit cost values were used, account for approximately 61 percent of the total budget.

Crew Resource Allocations Based on the existing vegetation workload and the production values provided by LG&E and KU, crew resource needs were estimated. Table 9 presents a summary of the estimated annual crew resource requirements based on a fiveyear cycle.

It should be noted that crew estimates are approximate and are based on the average crew sizes as indicated. Available annual work hours were estimated to be 1,800 hours.

Voltage	3-Man Yard Tree Crew	3-Man Mechanical Trimmer	3-Man Climbing Crew	3-Man Excavator Re-Clear Crew	3-Man Mowing Crew	3-Man Hand Cut Brush Crew	3-Man Low- Volume Foliar Crew	2-Man High- Volume Foliar Crew
69	0.92	7.15	7.35	0.07	0.36	3.28	5.93	2.25
138	0.35	4.50	1.02	0.01	0.36	1.75	2.77	1.41
161	0.04	2.85	3.57	0.03	0.16	1.09	2.33	2.25
345	0.12	3.19	1.59	0.00	0.16	1.09	2.33	2.25
500	0.00	0.24	4.10	0.01	0.03	0.22	0.40	5.34
Total	1.43	17.93	17.63	0.12	1.08	7.43	13.85	12.09

 Table 9.
 Annual Crew Resource Allocation Estimate by Crew Type (# of crews).

Crew estimates are based on the work type and recommended maintenance practice as determined by the ECI field surveyor. Changes to the maintenance practice will affect crew make-ups and allocations.

Herbicide crews account for approximately 25.9 crews annually or 36 percent of the total crews and will utilize approximately 34 percent of the annual budget. The two and three-man herbicide crews will provide the required support to complete the low and high-volume herbicide workload. Three-man mechanical and climbing crews are the largest resource requirement at approximately 35.7 crews annually or 50 percent of the total crews and will utilize approximately 60 percent of the annual spend. The three-man mechanical and climbing crews will be responsible for all side trimming, incompatible ROW tree removals, and priority trees.

Recommendations Utilizing the information gathered in the ground survey, ECI developed the estimated total transmission workload, budget, and man-hour requirements for the LG&E and KU transmission system.

Budget and workload assumptions:

- Recommended maintenance practices for the identified work units assume the utilization of Integrated Vegetation Management (IVM) principals and the maximization of herbicide use wherever possible to minimize future vegetation management expenditures. The use of herbicides will decrease future work (fewer stems per acre) thus requiring far less effort when IVM is fully implemented on the LG&E and KU system. With the implementation of IVM and continued herbicide use there should be minimal mowing required in future cycles.
- Brush acres maintained through mechanical brush clearing methods (i.e. mowers) were not incorporated into acre counts for high or low-volume herbicide treatment.
- Per request from LG&E and KU, the ROW width used for calculating the amount of brush acres was 150 feet for all transmission voltages. Actual ROW width varies between and within each voltage category and it is recommend that prior to assigning work brush acres would be re-calculated to represent actual ROW width for those schedule circuits.

Best management practices and IVM are the focus of the ECI recommendations presented in this section. Refer to Appendix C for additional details on recommended industry best management practices.

Recommendations ECI recommends the following program specific items based on the field data collection and observations of current vegetation practices on the LG&E and KU transmission system:

- 1. Transition maintenance program to cyclical maintenance.
- 2. Continue to remove incompatible trees within the ROW and particularly under the conductors (within the wire zone corridor).
- 3. Determine and document the ROW width for all LG&E and KU transmission circuits.
- 4. Develop a hazard tree¹² ground patrol to address potential risk from trees that may not be visible through normal routine aerial inspections.
- 5. Establish a list or database of hazard tree locations and develop a priority program to determine which trees should be removed first.

¹² Danger trees are trees tall enough to breach action threshold if they fell toward lines regardless of condition.

This database may include ash trees that could be affected by the emerald ash borer (EAB).

- 6. Continue to enforce vegetation maintenance clearance specifications for transmission voltages and the policies and standards specific to LG&E and KU needs and conditions. Current specifications appear adequate to maintain vegetation on the transmission system.
- 7. Ensure that vegetation maintenance crews exhibit reasonable production levels by implementing a work reporting / measurement system and utilize the records to evaluate crews and compare contractor performance.
- 8. Implement Integrated Vegetation Management (IVM¹³) as the guiding maintenance principle on the LG&E and KU transmission system.
- 9. Re-establish the transmission corridor ROW edges wherever practical to bring the corridors back to specification by voltage.
- 10. Continue to maximize herbicide use where practical to minimize future vegetation management costs and better manage for compatible plant communities.
- 11. Once established maintain consistent transmission vegetation maintenance program funding to maximize overall program effectiveness and ensure compliance with NERC Standards FAC-003.
- 12. Consider increasing vegetation management oversight to address the addition of approximately 46 crews to meet workload requirement for a 5-year cycle (Appendix D).

¹³ IVM = A system of managing plant communities in which compatible and incompatible vegetation is identified, action thresholds are considered, control methods are evaluated, and selected control(s) are implemented to achieve a specific objective. Choice of control methods is based on effectiveness, environmental impact, site characteristics, safety, security and economics. ANSI A300 (part 7)-2012 IVM.

Appendix A: Contracting Strategies

Introduction to Contracting Strategies

Three different approaches are commonly used by electric utilities to contract line clearance work. These include "time and material/equipment" (T&M), "unit price" and "firm price" or "lump sum" pricing strategies. Each has advantages and disadvantages that are important to understand, and there are multiple variations possible within each pricing family. Each carries a different risk profile for the contractor and the utility. Unit price and firm price contacts are inherently performance-based contracts. However, T&M with incentive pricing can also be a performance-based contracting strategy.

Performance-based contract strategies generally offer the lowest production risk for the utility by placing the burden to monitor crew productivity on the tree contractor and "incentivizing" the contractor to control costs. This applies to firm price, lump sum, unit price, and T&M with incentive type contracts. However, it should be understood that in order for these contract strategies to be effective, the utility and contractor should have a thorough understanding of the work scope, historical man-hours and costs for the work units to be maintained within the contract period. While it is possible to utilize these specific contract types for all work (i.e. ticket type work as well as preventative maintenance work), they are the most effective in situations where the scope of work is better defined such as on preventative maintenance. Ticket work such as Customer Trim Requests and Restoration are often too variable and can lead to higher "unit" prices due to the "contingency" contractors may build into their bid to account for this uncertainty.

Where historical data is not available, some utilities are successful in developing performance-based contracts by clearly defining the project scope prior to bidding through the development of detailed work plans. Pre-planning to define clearances, clearance exceptions, and removals has proven to be a very effective strategy in receiving least cost competitive bids. Contractors provide pricing on the defined work scope that the utility has pre-designated, thus eliminating guess work on the part of the contractor and eliminating the "contingency" cost that contractors build into bids. However, this does require additional effort on the part of the utility to employ knowledgeable personnel to perform the pre-work planning as well as post work acceptance. This strategy generally works well when the utility is developing firm price contracts in the form of a guaranteed cost per mile or a guaranteed cost per circuit.

Utilizing a T&M with incentives, such as Target Pricing, is a viable alternative for preventative maintenance work, but does require an extensive knowledge of historical man-hours in order to develop "should take times" in order to set contractor valid targets or thresholds for each work unit. In this contract type, the utility agrees to pay the contractor for their total actual manhours incurred to complete the work unit. The contractor in turn, agrees to meet the established target and "share" with the utility any cost savings

achieved by completing the work unit with less man-hours than allotted. Some contracts also include a shared "penalty" where the contractor agrees to also share the cost of any work units exceeding the threshold man-hours thus, this provides the contractor with an incentive to find cost savings while minimizing their perceived risk in relation to their skepticism to utility provided targets.

Another variation to this contract type includes a T&M not to exceed. In this contract type, the contractor and utility agree that any cost savings will be shared; however, the contractor bears the entire burden for any cost over-runs above the man-hour threshold set by the utility. The advantage to this contract strategy is that the utility can have 100 percent confidence in their maximum expenditure which they can then use to better plan and budget. The disadvantage is that the contractor may include higher pricing due to the "contingency" variable and therefore, it may not offer the same cost savings as could be expected through the shared incentive/penalty contract.

Utilizing multiple contract strategies for vegetation management is generally the most cost effective. Performance based contracts are preferred for preventative maintenance type work but should be utilized in combination with other contract strategies to ensure overall program cost effectiveness. Firm price or unit price contracts are most effective for brush maintenance or herbicide treatment programs where the contractor can easily inspect and quantify the work volume. Competitive bidding of these work types ensures the contractor will provide the lowest unit price based on their estimated cost to complete the defined work scope and their known material costs (i.e. herbicide costs). T&M contracts (without incentives) offer the greatest level of flexibility to the utility in terms of being able to easily add or remove work scope and therefore are recommended for ticket type work. For the contractor, T&M minimizes their risk where work scope is variable or undefined as in Customer Trim Requests and Restoration type work. This allows the contractor to provide better pricing but shifts the burden to the utility to ensure that crews remain productive. Even so, T&M is generally considered the preferred method for these work types. A combination of all the contract strategies tailored toward specific work types, will offer the greatest potential for cost savings to the utility while minimizing the resources required to monitor contractor performance.

Well-documented inspection of completed work and establishment of clear standards are critical to achieving value from firm price or unit price contracts. Where clearance requirements may be variable due to customer concerns or in situations where work scope is not clearly defined (as with ticket work), T&M normally can provide a better value.

In recent years, the impacts of fuel price fluctuations have become a major concern for contractors as well for the utilities they work for. Concerns arise when contract rates are set at a time when fuel prices are at the extremes and then change dramatically over the life of the contract. This either leaves the contractor with a windfall profit if fuel prices decrease (and the utility with higher costs) or can result in significant loss of profits for the contractor if fuel prices increase. Shorter contract periods (i.e. one-year) can minimize potential risk, but can be costly in terms of the cost to develop new contracts every year, and in terms of higher rates from contractors due to increased risk from shorter contract periods. Many utilities have elected to incorporate fuel escalators into their contracts to offset this concern.

The following are brief descriptions of the common contracting strategies:

Time and Materials (T&M)

T&M is normally the least risky for the contractor since most of the production-related risk is born by the utility. T&M contracts with performance measures and incentives tend to move some of the production risk back to the contractor. T&M often results in the highest work quality. Poor performance may subject a contractor to contract termination or result in assignment of "penalty points" as part of future bid evaluations. For work that is highly variable in nature, difficult to quantify in advance and where quality and customer relations are significant concerns, T&M may be the most desirable method.

Unit Price

Unit price work shifts production risk to the contractor but requires preplanning by the utility to designate which units the contractor should complete. Units are normally a tree trimmed, a square area of brush removed, footage cleared, or a tree removed by diameter classes. There is a natural incentive for the contractor to provide only the level of quality enforced by the utility. Consequently, quality control inspection by the utility is an important administrative requirement for this pricing strategy as well as work completion inspection. Administration of unit price contracts can become burdensome for utilities with high tree densities.

Firm Price

Firm price work also shifts production to the contractor but also shifts work unit selection to the contractor. The natural incentive in this pricing strategy is for the contractor to select the minimum acceptable units and provide the minimum acceptable quality. Post-work inspection by the utility is critical to assuring that all work was completed in compliance with the established specification. Tree removal is often an issue in a firm price contract since costs for tree removal can be highly variable. Consequently, trees to be removed are sometimes identified in advance as part of the bid package preparation. Alternatively, unit prices by size class for tree removal can be established or tree removal can be completed on a T&M basis for trees specifically authorized by the utility. Firm price is best suited to situations where the work can be clearly defined and understood by the bidders. It should also be limited to locations where there will be good competition by a number of bidders. Awarding of concurrent firm price contracts to multiple contractors is desirable. Small firm price contracts bid to companies that do not have a local presence frequently results in higher pricing to cover the cost of per diems or personnel relocations necessary to establish a labor force.

Turnkey and Incentive Based Contracts

Turnkey pricing shifts the maximum risk from the utility to the turnkey service provider. This pricing strategy normally is accomplished by establishing incentives tied to accomplishment of specific objectives such as cost control, tree-related reliability targets, and customer relations. Because most of the program management responsibility is that of the contractor, it is critical that the utility closely monitor the performance objects through periodic review of key performance indicators. A variation of turnkey pricing is a management services contract with a third party management firm that administers contracts on behalf of the utility. The contracts for craft labor and equipment may continue to be with the utility or through the management company. The management services company may utilize any or all of the other pricing methods. This pricing strategy should be utilized if the utility has limited management resources or desires to totally overhaul existing systems, methods and practices.

Target Pricing Strategy

Target Pricing involves an efficient and effective use of combined customer notification and tree selection work planning that becomes a basis for establishment of Target Price for individual circuits or circuit segments. Documented workload in terms of tree pruning, tree removal and brush control units, multiplied by realistic costs per unit worked (based on work history by district) allows creation of the target price that contractors can be incented to meet or beat.

Using this system the line clearance contractor is paid on the basis of T&M rates as work progresses. Reconciliation of actual production cost compared to the Target Pricing occurs quarterly.

This strategy requires designation of specific work units and agreement from the line clearance contractors to work the units designated by the Work Planner. Work Plan packets are prepared and distributed to crews from a Work Planning database and populated through Work Planning data acquisition software. Line clearance crew time and production must be monitored and recorded in a production database.

A simplified example of a Target Pricing work sheet is illustrated in Table 10. Table 11 is an example of a simplified quarterly reconciliation table.

Unit Description	Plan Quantity Circuit xyz	Standard \$/Unit	Quantity x Unit Price
Bucket			
Trim 4"- 8"	300	\$20	\$6,000
Trim 8" - 12"	47	\$30	\$1,410
Removal 12.1" to 24"	3	\$170	\$510
Manual		*	A i a a a a
Trim 4"- 8"	655	\$25	\$16,375
Trim 12" - 24"	9	\$140	\$1,260
Brush removal	57	\$240	\$13,680
Total Standard Cost for Circuit xyz			\$39,235

Table 10. Target Pricing Circuit Summary.

Table 11. Target Pricing Quarterly Reconciliation.

Unit Description	Quantity x Unit Price
Standard Cost	\$96,268
Actual Cost	<u>\$83,040</u>
Amount Actual Lower than Standard	\$13,228
Percent Actual Below Standard Cost	13.7%
5 to 25% Qualified Bonus Tier Percentage	25%
Incentive Amount	\$3,307

There are several requirements that must be in place for a Target Pricing strategy to be effective. They include:

- 1. Effective processes for work planning
- 2. A field data collection and work documentation system
- 3. Realistic production data by district or by characteristics such as maintained/unmaintained, accessible/inaccessible, overhang, etc.
- 4. Contracts with line clearance contractors that complement the Target Pricing strategy

Benefits of this strategy have included lower costs than firm priced or T&M bidding strategies. Because tree selection is closely aligned with utility goals, adequate reliability can be efficiently achieved.

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> Appendix B: Transmission System Vegetation Survey Form

Þ ♣, 8 2 3 S /es /es 6 6 6 Total Left Edge: 2 ~ œ œ Horse Farm: Other (explain): Patrol Required: -2 Right ROW Edge Maintenance Surveyor: 9 9 9 Yes s ŝ ŝ Take Picture marks Other Flight Date: 2/13/2015 8 4 4 4 MVCD: + + c 3 m 2 7 3 Yes # Yard Trees: # Hazard Trees: 📒 -----2 • <Swap> StopSub: 0 • Span Accessible: Photo#: Manual Trim (R): Mech Trim (R): Re-Clear (R): Last Maint Date: 10 9 2 10 19 2 2 8 ious Reco C 6 6 6 6 6 6 6 6 Total Left Edge: Total Brush: œ œ œ ~ œ œ œ œ 2 -2 -2 Voltage: StartSub: nance 9 9 9 9 9 9 9 9 ۲ Latitu Maint ŝ ŝ ŝ ŝ S ŝ ŝ 5 Clear Left ROW Edge 4 4 4 4 4 4 4 4 Begin GPS End GPS Aerial Survey Form m m m m m m m m Search 3 3 3 3 7 2 3 3 🜾 No Filter --------0 • • • • • 0 0 Trim (L): Re-Clear (L): Clear-No Veg: Hi Vol Foliar: Mech Cut/Trt: [rim (L): ow Vol Manual Hand Mow: Foliar: Record: M 4 1 of 1 LineCode: LineName: Prev. Str#: SurveyForm :ructure #: ą

TRANSMISSION RIGHT-OF-WAY VEGETATION SURVEY LG&E and KU Attachment to Response to KIUC-1 Question No. 31 Page 34 of 55 Bellar

Appendix C: Recommended Industry Best Management Practice Strategies

Recommended Industry Best Practices Strategies

Transmission owners need to develop practices that fulfill the requirements of the vegetation standard in a cost effective manner. These practices or strategies must be documented and consistently implemented. Over time, certain practices have been shown to be successful in preventing outages due to vegetation. Many of these practices were incorporated into the NERC Standard FAC-003 since the group that developed and approved the standard included experienced transmission vegetation managers. The American National Standards Institute (ANSI) has established standards for vegetation maintenance on transmission ROW¹⁴. In addition, the International Society of Arboriculture (ISA) has issued a companion publication to ANSI A300 Part 7, Best Management Practices, Integrated Vegetation Management.¹⁵

Work Management ECI proposes the following best practice work management recommendations as part of any successful transmission vegetation management program. The utilization of some or all of these work management tools and methods may already be in use at LG&E and KU and therefore, these recommendations in no way imply the current lack of appropriate procedures. The original scope of this workload study did not include a review of the transmission program procedures or strategies. The recommendations presented here should be considered for implementation by LG&E and KU if not already integrated into the existing management program.

- Develop and keep current a vegetation management plan. Even though the current NERC standard FAC-003 does not explicitly require a vegetation management plan (TVMP), a TVMP is an extremely valuable tool to plan and implement both short-term and long-term vegetation management goals. A TVMP is the "road map" for vegetation management and provided direction and overview of system goals. It details how the work will be determined, planned and executed and provides a framework on how vegetation management will be implemented to ensure the reliability of the system. Annual plans are a subset of multi-year long-range plans. A plan will aid in developing budgets and tracking the work performed on individual lines.
- **Develop and keep a current work schedule.** The TVMP will detail system and procedures for documenting and tracking the planned work. Plans are in need of constant update as work progresses. Updating will track work in progress and allow notice for any necessary adjustments.
- **Implement a system of inspecting planned work.** Documenting the inspection of completed work is also necessary to properly approve payment and ensure work reported as complete by the contractor meets

¹⁴ ANSI. 2006. The American National Standard for Tree Care Operations - Tree, Shrub, and Other Woody Plant Maintenance- Standard practices (Integrated Vegetation Management a. Electric Utility Rights-of-way). A 300 Part 7. American National Standards Institute, NY.

¹⁵ Miller, R.H. 2007. Best Management Practices- Integrated Vegetation Management. International Society of Arboriculture, Champaign, II.

LG&E's and KU's expectations. Spot checks of completed work are commonly used with inspections of additional completed work when deficiencies are found. It is important to identify work that does not meet the standard early so that corrections can be made before more deficient work is completed. This will save time for both the utility and the contractor performing the work. Formal documentation of the work inspection is recommended.

- **Provide for consistent budgeting.** A consistent plan needs consistent funding. Budget reductions mid-year can cause workforce disruptions that increase future costs. Any changes to the established annual plan require documentation.
- Establish and enforce work specifications. The personnel performing the work must know exactly what is expected of them. The work inspector must know the specifications to properly enforce them. If future contract strategies are being considered, a clear, concise specification is required to communicate LG&E and KU vegetation maintenance goals to perspective contractors. The clearer the contract specification, the better the pricing from a perspective new contractor.
- **Develop action thresholds.** Develop a "clearance at time of maintenance" (clearance 1) distance and establish a minimum clearance threshold (clearance 2) that vegetation should never exceed. This threshold clearance will provide an additional margin of error to allow for vegetation growth, line sag and variations in maintenance cycles. Best practice utilities have developed an action threshold clearance value between Clearance 1 and Clearance 2 in order have a intermediate point to take appropriate action to avoid violating the vegetation standard. Another type of action threshold relates to the maximum height that brush¹⁶ is allowed to attain to provide efficient and cost effective foliar application of herbicides. Since herbicide application is frequently less costly than mechanical clearing, it is important that brush is not allowed to grow taller than the maximum height 8-12 feet for effective herbicide use.
- Develop a mitigation plan for exceptions/non-standard maintenance. Keeping a record of locations where exceptions to standard practices exist is important to prevent outages or violations of LG&E's and KU's minimum acceptable clearance (between vegetation and conductors). An example would be where pruning is the only vegetation maintenance option allowed by the easement. The record should be specific as to the nature of the situation and regular inspection should be scheduled. Use of an automatic reminder system is recommended. Renegotiating or acquiring easements to eliminate clearance restrictions, payment for tree removal or replacing tall

¹⁶ Brush is normally defined as immature (less than 10.2 cm or 4 inches in diameter), tall-growing tree species that would grow tall enough to interfere with conductors

growing trees with compatible vegetation should be considered to eliminate the situation.

- **Develop standardized processes.** A uniform vegetation management plan for the entire LG&E and KU system that coincides with LG&E's and KU's current specification is key.
- Implement an Integrated Vegetation Management program (IVM). IVM is the art of controlling plant populations based on scientific principles from such fields as ecology, zoology and biology. Vegetation is managed to produce desired conditions (plant community density, structure and composition) and associated values consistent with stakeholder objectives on a sustainable basis. Stakeholders include both easement or fee holders, and all stakeholders and interested parties who may be influenced by IVM activities.
- Manage the ROW by zones. Managing the ROW in the zone immediately beneath the conductors differently from the rest of the ROW, known as the wire zone-border zone concept, is a successful approach to prevent outages in a cost effective manner (Figure 7), where sufficient ROW width is present. Different management techniques can be applied to these two zones and result in the many economic, operational and environmental benefits associated with the use of IVM techniques.

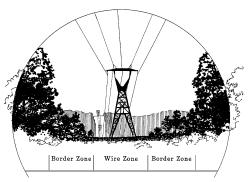


Figure 7. Wire Zone / Border Zone Vegetation Management.

- Maintain the ROW edge. Side pruning consists of pruning trees on the edge of the ROW. This work can be accomplished through the use of truck-mounted aerial lift equipment (bucket trucks), by manual climbing, or through the use of mechanical pruning equipment, such as a Jarraff, Aerial Saw, or similar tools.
- Coordinate transmission work with related distribution work. Occasionally distribution lines are found on the same ROW and even the same structures as a transmission line. Managing the vegetation simultaneously on both facilities can be cost effective. Problems can arise when different departments within the same company manage facilities with varying cycles, maintenance methods and budgets. The

transmission maintenance organization should take the lead in coordinating and ensuring that the work is completed because a transmission outage has greater consequences than a distribution outage.

Integrated Vegetation Management

In Integrated Vegetation Management (IVM), the selection of control options is based on effectiveness, site characteristics, environmental impacts, safety, and economics. Good vegetation management is based on an understanding of plants and their environment. A holistic approach considers the interrelationship of plants, site, and species composition and growth rates.

IVM is recognized as an industry best practice, and it is therefore recommended that LG&E and KU adopt this strategy for the maintenance of undesirable brush on its transmission system. In general, this would be a combination of brushing, mechanical clearing (hydro-axe), and the use of herbicides to manage trees and bush on the LG&E and KU system.

Cutting deciduous brush without applying a follow-up herbicide application to the stump surface will permit the vegetation to re-sprout, thus requiring future maintenance. Trimming brush and/or allowing it to mature results in its becoming a more expensive and often permanent part of the workload. Trimming brush and the failure to use herbicides on cut stumps are not cost effective long term brush management techniques.

ECI recommends that LG&E and KU continue to remove trees with the ROW and ROW edge and treat the deciduous cut-stumps of trees and brush with appropriate herbicides whenever possible. LG&E and KU should continue to enforce the existing specifications for removal and stump treatment. This will prevent future expansion of the system vegetation workload and future line clearance cost increases.

On most of the LG&E and KU transmission system, there appears to be an opportunity to treat standing brush less than 8 - 12 feet tall with either foliar or basal herbicide applications, avoiding hand cutting. Taller standing dead brush can become a source of complaints, and taller brush can be difficult to control with foliar applications without risking exposure to off-target plants. This use of a basal bark-applied herbicide would be a particularly valuable tool in the removal of tall-growing tree species growing in sensitive areas or where there is concern for off-target damage.

Use of herbicides is essential if LG&E and KU is to maximize the benefits of mechanical clearing and brushing. Herbicide use is an important component of an IVM strategy. LG&E and KU should continue to enforce the specifications that require use of herbicides to treat stumps. The effectiveness of selective herbicide applications has been well documented through long-term studies on utility rights-of-way in the central and northeastern United States. Results from treatment simulation models developed through these studies project that sites dominated by deciduous species would nearly double in stem density by the end of two cycles if simply cut without a follow-up herbicide application (Figure 8). These same sites would be expected to

exhibit about a 50 percent reduction in stem density over the same time period if treated with a selective herbicide application.

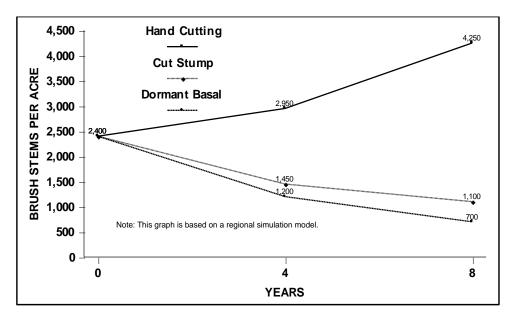


Figure 8. Effectiveness of Herbicides for Control of Brush Over Time. Results of long term study of brush management on utility rights-of-way in the northeast United States.

Currently, herbicides are effectively used in the control of ROW vegetation. This is an integral part of any IVM program. An important consideration is that a herbicide program must be environmentally safe and professionally supervised to maintain public acceptance. Line clearance crews performing herbicide applications should receive proper training in species identification and herbicide application methods that are approved and deemed acceptable by the public and land owners.

It is recommended that LG&E and KU continue to pursue the selective use of herbicides (e.g., foliar and basal) for the management of communities of deciduous brush species as a part of IVM program. Utilizing contractors trained and experienced in the use of herbicides will ensure the continued success of the LG&E and KU vegetation management program.

Herbicide Safety and Risk Assessments Today's herbicides control tree/brush re-sprouting by blocking chemicals needed by plants to convert water, sunlight and nutrients into food for growth. Since these same chemicals are not present in animals and humans, the herbicides are very low in toxicity to people or animals. Without any food, the treated weed trees on the right-of-way wither and decompose. Treated stumps dry out and don't re-sprout. Safety for humans and the environment includes not causing adverse effects that are unacceptable. In this context, risk assessment is the process by which the likelihood of unacceptable adverse effects from the use of various methods of vegetation management can be determined.

An extensive report prepared by ECI provided the technical basis for and a summary of the risk to human health, wildlife and the environment from the use of 10 herbicides by a utility owner in the US. These herbicide uses included broadcast foliar, selective foliar, basal bark and cut stump applications. This assessment concluded that the margins of safety for herbicide use by the utility that commissioned the assessment were "adequate to assure protection of human health of workers and the general public."

ECI also completed an environmental impact statement resulting in the authorization of herbicides to control right-of-way vegetation in the LG&E and KU National Forest in Pennsylvania (US). Subsequent evaluation of herbicide use in the National Forest confirmed safe and effective use of foliar herbicides to control brush on utility right-of-way.

The human health risk assessment methodology used in these reports was the one generally recognized by the scientific community as necessary to characterize the potential adverse human health effects of chemicals in the environment. It is the same process used in judging the human health risk from cosmetics, food additives, pharmaceuticals, various household chemicals, and many other materials.

Herbicide Acceptance by Wildlife Groups in the United States In the US, stump control herbicides are used not only by electric utilities, but also by numerous private and governmental wildlife habitat improvement organizations. Examples include:

- The Nature Conservancy on projects designed to limit the spread of invasive and non-native trees and shrubs. This would be similar to the efforts in the UK to eradicate the invasive plants Japanese Knotweed and Himalayan Balsam.
- Under the banner of a former organization called Project Habitat®, groups such as the National Wild Turkey Federation, Buckmasters, Butterfly Lovers International and Quail Unlimited have joined together to encourage utilities to implement an "Integrated Vegetation Management" (IVM) approach to maintaining utility easements that appropriately utilizes herbicides as a component in the control of right-of-way vegetation. They have recognized that environmental benefits of herbicides, when properly used, outweigh any adverse risk and are far more desirable than the alternatives to herbicide use, such as frequent mowing or hand cutting of undesirable trees.

Significant research has been undertaken over the past 30 years in the United States to document the impact of right-of-way herbicide use on the

environment, wildlife and management costs. Much of this research has been conducted by ECI and its university research associates. Stems per acre decrease over time through the use of herbicides, as does associated maintenance costs.

Brush control through the use of herbicides is an extremely cost effective maintenance tool. Figure 9 illustrates the successful use of herbicides and provides cost effective, environmentally acceptable and long-term brush control.



Figure 9. Example of good brush control through the use of herbicides.

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> Appendix D: Recommended Staffing to Contract Tree Crew Ratio

Need for Additional LG&E and KU Vegetation Maintenance Staffing

The vegetation maintenance program at LG&E and KU is sufficiently staffed to effect the administration of the current line clearance contracts and contractor staffing at the time of this review. The three ROW Coordinators manage 25 contract tree crews. As LG&E and KU adopts ECI's budget and staffing recommendations additional contract crews will be added to the system manage the increase workload. Additional staff (in house or contracted) will be required to effectively manage the increased work force.

Figure 10 shows data from two benchmarking studies that evaluated the average number of line clearance crews supervised by utility arborists. In the Pennsylvania Electric Association (PEA) and Edison Electric Institute (EEI) studies, the average ratio of line clearance crews to each utility arborist was respectively 8 and 11 (Figure 10). However, in both studies 75 percent of the reporting utilities average 10 crews or less per supervising arborist. Figure 10 also shows that in a recent benchmarking study of over 20 utilities, the two overall best-in-class utilities have a ratio of approximately one utility arborist (including the system arborist) for every 6 line clearance crews. Figure 10 also compares the current crews supervised by the system forester to the anticipated ratio should seven-year cycle be adopted.

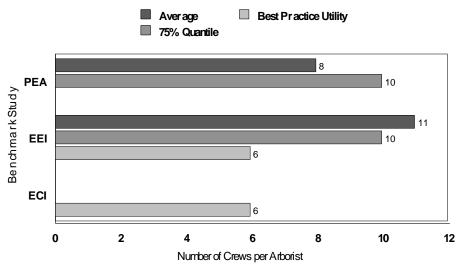


Figure 10. Comparative Data on the Average Number of Line Clearance Crews Overseen by Utility Foresters¹⁷.

Based on the anticipated increase in contractor tree crew staffing on the transmission system it is recommended that LG&E and KU establish an additional three Utility Forester positions (in-house or contract) to assist the ROW Coordinators in the day to day management of the program. If fully implemented, the LG&E and KU Transmission VM contractor tree crew work

¹⁷ PEA = Data from a 7 utility survey conducted by the Pennsylvania Electric Association.

EEI = Data from the Edison Electric Institute benchmark study of 29 utilities.

ECI = Data from a 1998 benchmarking study of 22 North American utilities.

force will be approximately 72 crews for the first cycle. This will provide a ratio of approximately 12 crews per LG&E and KU vegetation management staffing. In order for the program recommendations to be implemented properly it has to be implemented correctly in the field. These three additional individuals will be primarily responsible for planning work and auditing the tree crews. They should also be capable of assisting the ROW Coordinators with any work that is appropriate for them to do. For example inspecting customer requests, work associated with new construction, supervising tree crews, and handling of customer complaints or refusals. After the completion of the first cycle, the number of tree crews is may decline, then staffing can be reduced to meet the need. The use of contract foresters would be an option for staffing these positions as they are more easily flexed.

The individuals should primarily be responsible for field implementation of the line clearance program and the evaluation of the line clearance crews and contractors within their area of responsibility. The Utility Foresters should report directly to the ROW Coordinators. This will provide a measure of control over individual interpretation of company guidelines and will ensure consistent implementation of appropriate work practices and operating procedures across the system. These positions will assist in ensuring contractor compliance to ANSI A-300 standards and that crews are properly instructed on the correct and safe use of herbicides. The position will audit contractor work to ensure that clearance requirements are met.

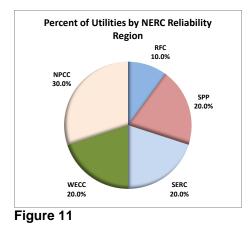
The Utility Foresters will assist in managing programs that provide ongoing information on field conditions, including tree crew production records (trees pruned removals, herbicide use, and brush treatment), electric service interruption data and conduct post-outage investigations.

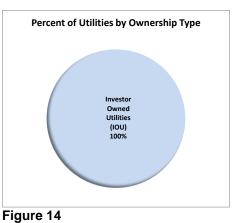
The Utility Foresters should be trained in all aspects of utility vegetation management, including proper pruning techniques and herbicide use. The Utility Foresters should have a minimum of 2 years of experience in utility vegetation management, ISA certification and, preferably, a Bachelor's Degree in Forestry or a related field. This will help to ensure consistent implementation of program policies and will enable the ROW Coordinators to effectively evaluate the work being completed by the line clearance crews.

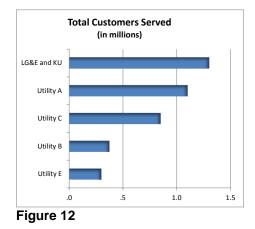
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> Appendix E: LG&E and KU Transmission System Benchmark Comparison

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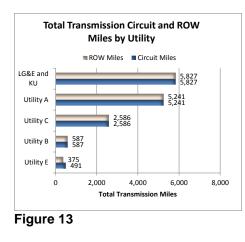


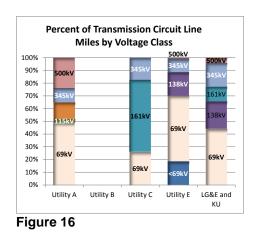




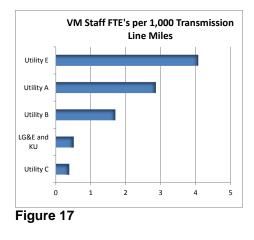
Utilities Regulated by	
a Public Utility or	
Service Commission(s)	
or other Agency(s):	
Centralized VM	
Program:	
VM Managed by	
Professional Forester	
or Arborist:	80%

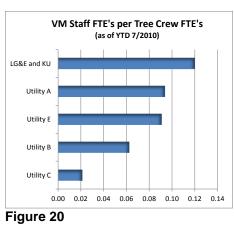


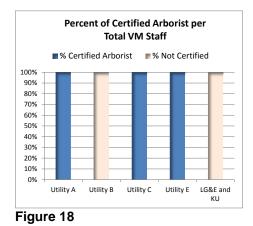


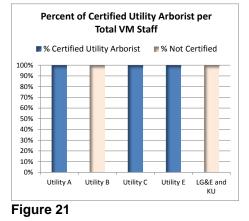


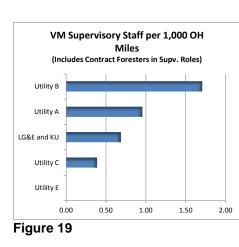
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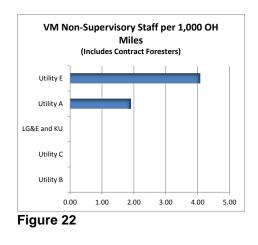




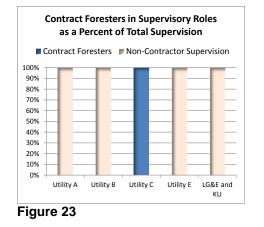


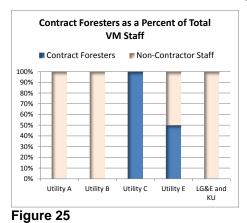


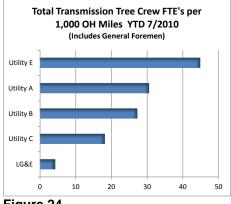




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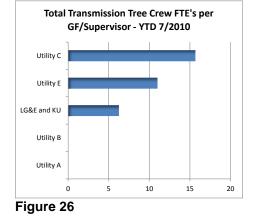
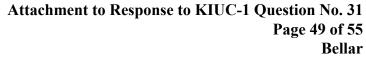
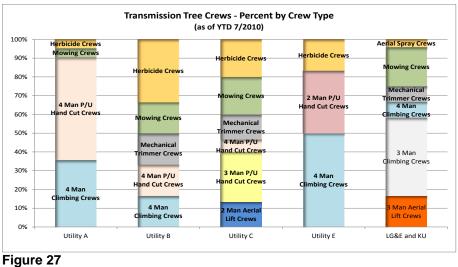
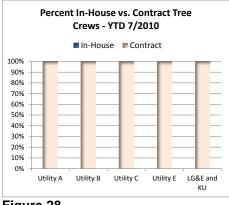


Figure 24







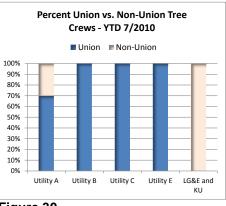
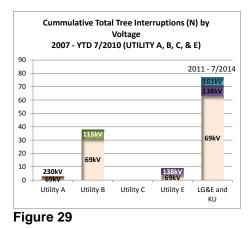
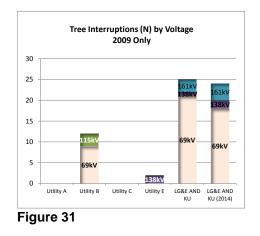
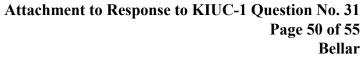


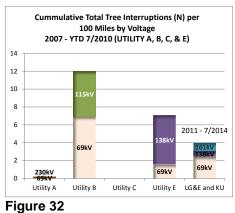
Figure 28

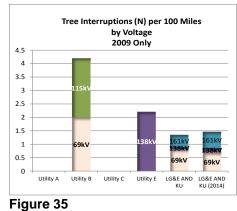




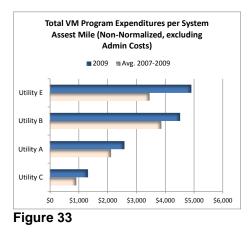


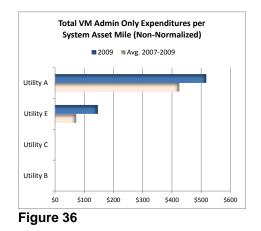


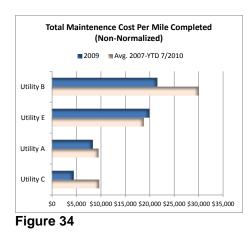


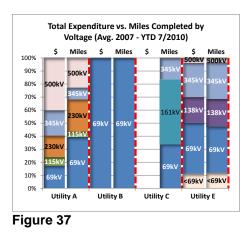




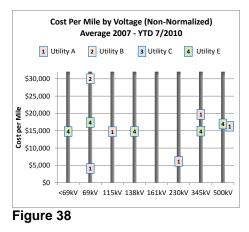


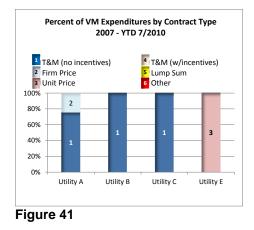


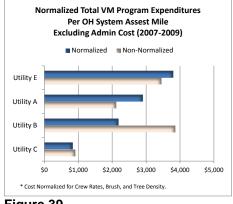




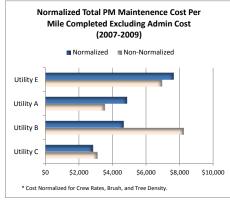
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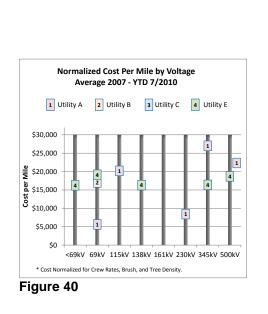


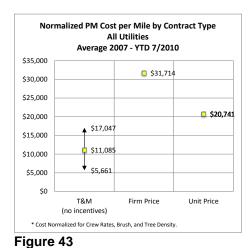






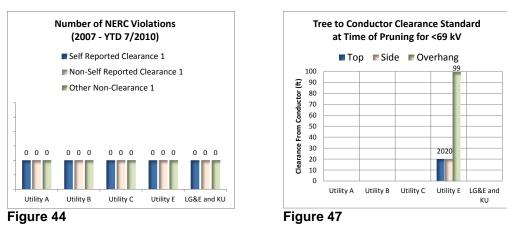


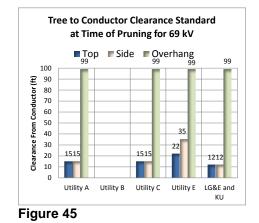


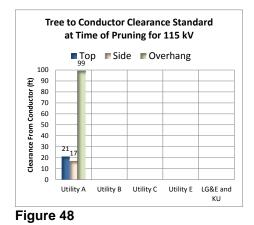


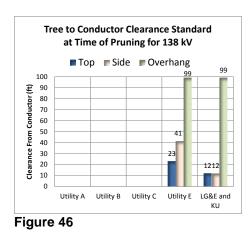


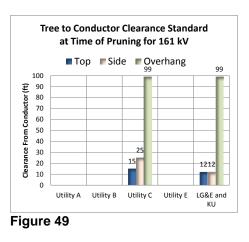
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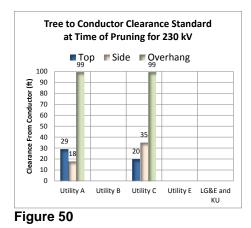


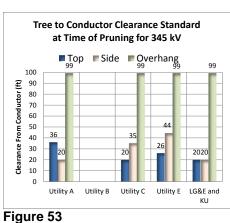


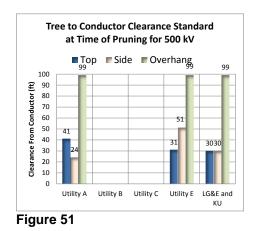


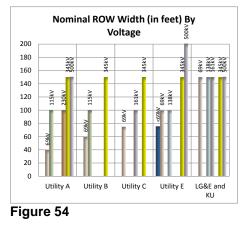


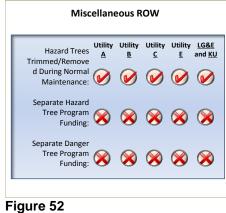
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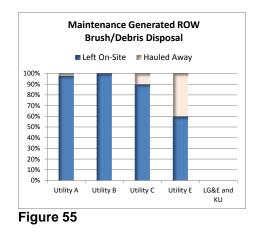










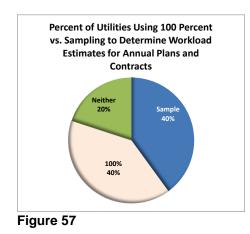


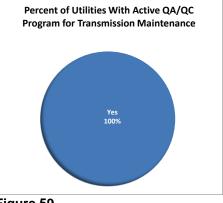


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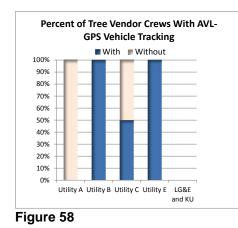
Tree Inventory System Capabilities	Utility A	Utility B	Utility C	Utility E
Work Prescription and Estimating (Work Planning)	X			
Map, Manifest and Work Package Generation	х			
GIS Tree Location Information	Х			
Electronic Facility Asset Maps with Tree Inventory Overlay	Х			
Cost Generation and Budgeting				
QA/QC Audit and Inspection Tracking	Х			
Payment Processing				
Electronic Billing and Payment Processing				
Productivity Tracking and Analysis				
Work Status and Completion Tracking (Work Management)	Х			
Reliability Tracking and Follow-Up Investigations	X			
Emergency Work and Restoration Management Coordination				

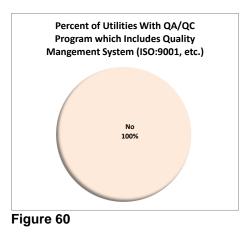
Figure 56



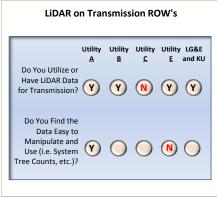


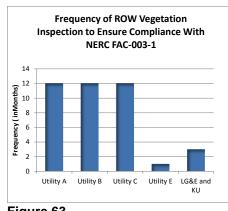






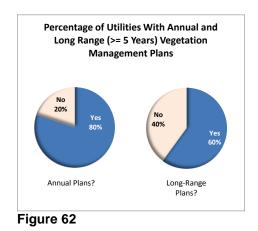
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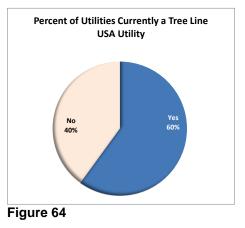












CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 32

Responding Witness: John P. Malloy

- Q.1-32. Refer to page 15 of Mr. Malloy's Direct Testimony wherein he describes the SAP upgrade in process for the Customer Care System. Please provide a copy of the Company's business case and all cost/benefit analyses performed in conjunction with the decision to implement the upgrade.
- A.1-32. See the attached Investment Proposal, which contains the cost-benefit analyses performed in conjunction with the decision to implement the upgrade.

Investment Proposal for Investment Committee Meeting on: October 28, 2015

Project Name: SAP Upgrade

Total Expenditures: \$27.1 million (Including \$2.6 million of Contingency)

Project Number(s): 204SER16

Business Unit/Line of Business: Customer Service and IT

Prepared/Presented By: Steve Woodworth, Alpha Troutman

Executive Summary

This Investment Committee proposal is to request approval of the SAP Upgrade project. The SAP Customer Care System ("CCS") is the customer information system platform providing meter to cash and customer service functions for LKS. The <u>recommended</u> alternative, "Upgrade with HANA", consists of three primary deliverables utilizing a System Integrator (SI):

- Reimplementation of Customer Relationship Management (CRM), upgrading to version 7.3 (the front end where customer interaction occurs),
- Technical upgrade of Enterprise Core Component (ECC) to version 6.7 (the foundational application that supports customer billing, meter reading and accounting activities), and
- Implementation of SAP Suite (CRM and ECC) on HANA database platform.

The purpose of this initiative is to utilize the existing investment in the SAP customer platform to take advantage of new developments in more recent versions and place LKS on the standard, full service level agreement for the system. Also, by implementing this recommendation, LKS can take advantage of the SAP strategic roadmap for future innovations such as Advanced Metering Systems ("AMS") and Meter Data Management System ("MDMS").

The "Do Nothing" alternative was deemed unacceptable due to system support limitations, increased potential for security vulnerabilities, significant complexity and costs to meet evolving industry and customer experience requirements and additional IT maintenance to address integrating an aging application with more current systems and databases. The "Upgrade without HANA" alternative was not selected as it would leave LKS in a less than optimal position regarding future functionality and ongoing support.

The "Upgrade with HANA" recommended alternative is estimated at \$27.1 million across 2016 and 2017 with a 12% contingency of \$2.6 million. Contingency is based on all expenditures, except hardware and licensing, and is included to cover potential cost fluctuations, changes in estimates / durations of in-scope items and minor scope changes. A total of \$26.7 million is included in the proposed 2016 Business Plan. A total of \$23.0 million is included in the approved 2015BP. Approval of this recommendation will require \$350K incremental funding over the proposed 2016 BP which will be addressed and allocated by the Corporate RAC.

This project is in compliance with the LKS IT Governance Principles to maintain fully supported information technologies and does not require separate filing with KPSC for approval.

Background

The SAP Customer Care System (CRM and ECC applications) was implemented in April 2009 with an initial capital investment of approximately \$84 million. In addition, approximately \$2.5-3.5 million in capital enhancements have been implemented annually since 2010. Since implementation, the Company has taken advantage of a common SAP platform allowing LKS to provide customers increased options through new rate structures, self-service offerings, and analytical capabilities to harmonize processes that benefit the customer experience. The goal is to upgrade to the most current stable CRM / ECC versions in order to continue maximizing the investment value through customer-focused functionality and extending the useful life of this asset. Below is a sampling of North American utilities utilizing SAP products.

Version	Utility Name						
CRM 5.2	LKS						
CRM 7.X (0,1,2,3)	American Water, PEPCO, Southern California Edison, SEMPRA,						
	Reliant, CenterPoint Energy, National Grid, Puget Sound Energy,						
	Allegheny, First Energy, Atmos Energy, Blue Bonnet, CPS Energy,						
	Hawaiian Electric, Huntsville Utilities, Hydro One, Idaho Power, LES,						
	Peoples Natural Gas, SASK Power, Source Gas, Snohomish, London						
	Hydro, Mobile Gas, and Terasen Gas						
SAP Suite on HANA	American Water, CenterPoint Energy, GRU, National Grid, Puget						
(by May 2017)	Sound Energy, Snohomish, Source Gas, TECO, Detroit Edison, and						
	Washington Gas						

CRM and ECC are SAP packaged applications that require external support from SAP for maintenance and system upgrades. Missing or deferring these upgrades increases the risk of system failure, extends restoration and recovery windows, creates compatibility issues with interfacing systems and limits the opportunity to take advantage of improved performance and new customer-focused functionality.

• Maintenance Support

Since 2011, CRM 5.2 has been on Client Specific Maintenance, which is the only standard support option available for this version. *It should be noted that LKS is the only SAP customer in North America still utilizing CRM 5.2.* It is a limited option in that Client Specific Maintenance provides no Service Level Agreement ("SLA") and, if there is not a known fix readily available to SAP, there is no guarantee of issue resolution. If a system failure occurs and cannot be resolved by LKS resources, LKS is completely dependent on the availability of qualified SAP resources on a time and materials basis.

If the CRM system became unavailable, Customer Representatives could not process customer requests such as moves, payment arrangements, and general inquiries about account(s). The customer interaction would be manually documented at that time and subsequently processed through the backend system. While payments could still be accepted, all disconnect for non-payment orders would be suspended since installment plans could not be established. Back office operations' time increases as processing steps and research are more difficult without

CRM available. Additionally, if the CRM outage occurred for an extended period of time, a degradation in bill accuracy and performance metrics would occur.

• Compatibility Issues

Running outdated versions of critical applications creates compatibility issues with interfacing applications (e.g., Genesys, GeoStan), internet browsers, databases and operating systems. Outdated versions also increase the potential for security vulnerabilities; thus, exposing LKS to new threats. Staying on aging applications creates additional IT maintenance activities to "back engineer" older versions to newer technologies increasing the risk of failures.

• Improved Performance

The replication of data between the ECC and CRM databases is a significant operational and technical challenge LKS has faced since implementation. The data inconsistencies that are created between these systems impacts LKS's ability to interact effectively with customers. This replication issue has been significantly reduced in the proposed versions of ECC and CRM. This will enable LKS to take full advantage of new customer offerings, such as Customer Notifications, using the best available customer data.

Suite on HANA provides inherent performance improvements that enhance system response time for the CRM application during customer interactions. This database platform also provides improved speed and accuracy of customer search capabilities, access to real-time data and predictive analytics.

• New Functionality

Moving to the proposed application versions will provide the standard full service product support for core functionality from SAP; thereby, managing the long-term total cost of ownership and avoiding costly custom developments for new processes and functionality requirements.

The proposed application versions will provide access to a technological platform for achieving LKS's strategic objectives to enhance the customer experience utilizing the following capabilities:

- Use of predictive analytics to effectively route customer communications to appropriate internal skill sets, providing the opportunity to increase first contact resolution.
- Real-time analytics to provide management access to more timely data for insight to operational effectiveness
- Standard AMS to avoid costly custom developments to replicate functionality
- Potentially eliminate the need for a separate Meter Data Management System which is SAP's direction for Suite on HANA.

• Alternatives Considered (1 – Recommendation, 2 – Do nothing, 3 – Delay, 4 – Next Best Alt)

 NOTE: In order to more realistically reflect the future impacts of the three alternatives considered, the NPVRR calculations below reflect the impacts of separate Automated Metering Systems and Meter Data Management implementations planned for 2019-2021. While separate initiatives, the decisions made on this upgrade directly impact the delivery and timing of these future projects.

- 1. *Recommendation:* Upgrade with HANA NPVRR: (\$000s) \$51,157 The "Recommendation" includes CRM 7.3 and ECC 6.7 on HANA as described in the Background section.
- 2. Do Nothing:

The "Do Nothing" alternative is unacceptable due to Client Specific Maintenance limitations, increased potential for security vulnerabilities, significant complexity and higher costs to meet evolving industry and customer experience requirements and additional IT maintenance to address integrating an aging application with more current systems and databases.

3. Delay:

NPVRR: (\$000s) \$61,925

The "Delay" alternative considers an implementation date of 2019, reflecting a delayed start of two years. This option exhibits the impacts of purchasing incremental support from SAP and regular capital enhancements that would be required prior to the project start date. This option is not recommended as it increases cost and does not address Client Specific Maintenance limitations as discussed above.

- 4. Next Best Alternative(s): Upgrade w/o HANA NPVRR: (\$000s) \$52,273
 - The "Upgrade without HANA" alternative was evaluated during the RFP process and became a key discussion point regarding the strategic direction of SAP products. SAP, system integrators, and Gartner Inc. emphasized this is SAP's direction and all future functionality will be built on this platform. Today, 350+ companies have implemented Suite on HANA across all industry groups with another 750+ implementations currently in progress. Although this option decreases the investment by \$3.7 million compared to the recommendation, it will leave LKS in a less than optimal position regarding future functionality and ongoing support.

Project Description

• Project Scope and Timeline

This project will upgrade ECC version 6.2 to version 6.7, re-implement CRM by upgrading from version 5.2 to 7.3, and implement the SAP Suite on HANA database platform. This project will establish a foundational platform for leveraging SAP industry developments in the future and provide Enterprise Level SAP support for the solution. Key milestone dates are shown below:

Milestone Event	Date
RFP Initiated for System Integrator	Jan 2015
Select System Integrator	Aug 2015
Project Approved by IC	Oct 2015
System Integrator Contract Awarded	Q4 2015
Project kickoff	Q1 2016
Implement into Production	Q2 2017
Post Go-Live Production Support Complete	Q3 2017

The current project estimate is 15 months. The go-live date of Q2 2017 is in compliance with PPL corporate policy "Managing Changes that Impact SOX Compliance" which discourages

systems' installations or upgrades during the fourth quarter of a year or during the last month of a quarter.

• Project Cost

The total cost of this project is \$27.1 million. A contingency of 12% (\$2.6 million) on all expenditure items (except hardware and licensing) is included for potential cost fluctuations, changes in estimates/durations of in-scope items and minor scope changes. Travel and expenses have been calculated and included in the project cost. The system integrator bid is time & materials.

Expenditure Item				
LKS Labor	8,219			
Contract Labor:				
System Integrators, Third Party Vendors (includes expenses)	12,129			
Software - SAP Licensing	725			
Hardware	2,000			
Other (travel, technical training, office expenses, misc.)	1,450			
Sub-Total	24,523			
Contingency (12% of all costs except licensing and hardware)	2,574			
Total	27,097			

Economic Analysis and Risks

• Bid Summary

See System Integrator for SAP Upgrade Contract Proposal for details on bid summary.

• Budget Comparison and Financial Summary

Financial Detail by Year - Capital (\$000s)	2016	2017	2018	Post	Total	
				2018		
1. Capital Investment Proposed	17,807	9,290	-		27,097	
2. Cost of Removal Proposed					-	
3. Total Capital and Removal Proposed (1+2)	17,807	9,290	-	-	27,097	
4. Capital Investment 2015 BP	17,200	5,800	-		23,000	
5. Cost of Removal 2015 BP					-	
6. Total Capital and Removal 2015 BP (4+5)	17,200	5,800	-	-	23,000	
7. Capital Investment variance to BP (4-1)	(607)	(3,490)	-	-	(4,097)	
8. Cost of Removal variance to BP (5-2)	-	-	-	-	-	
9. Total Capital and Removal variance to BP (6-3)	(607)	(3,490)	-	-	(4,097)	

Financial Detail by Year - O&M (\$000s)		2017	2018	Post	Total
				2018	
1. Project O&M Proposed	1,020	2,317	250	509	4,096
2. Project O&M 2015 BP	776	2,070	-	-	2,846
3. Total Project O&M variance to BP (2-1)	(244)	(247)	(250)	(509)	(1,250)

Financial Summary (\$000s):

Discount Rate:	6.5%
Capital Breakdown:	
Labor:	\$ 8,219
Contract Labor:	\$12,129
Materials:	\$ 4,175
Local Engineering:	\$ 0
Burdens:	\$ 0
Contingency:	\$ 2,574
Reimbursements:	(\$ 0)
Net Capital Expenditure:	\$27,097

Financial Analysis - Project Summary (\$000)	20	016	2017		2018		2019		2020		Life of Project	
Project Net Income	\$	(997)	\$	(1,142)	\$	(313)	\$	984	\$	515	\$	5,162
Project ROE	-2	21.10%		-10.00%		-2.50%		9.50%		5.70%		5.10%

By including SAP Suite on HANA in the scope of this project, internal capital related to future AMS and MDM projects is expected to decrease slightly over the 5 year planning cycle, and O&M IT costs are projected to increase due to license fees associated with SAP HANA software and hardware requirements. The existing level of capex is in the \$2.5 - \$3.5 million range. Staying on CRM 5.2 will require ongoing support and development on an aging infrastructure that is moving away from the current core SAP functionality. Upgrading to CRM 7.3 will immediately increase core capabilities and establish the platform for future functionalities which

will be supported by the IT department through break/fix, enhancements and system maintenance and will include a roadmap for support pack and version improvements.

- Assumptions
 - Project approach is to perform a technical upgrade to ECC (6.2 to 6.7), reimplement CRM (5.2 to 7.3), and replace Oracle databases with HANA for both CRM and ECC. If CRM 7.4 or ECC 6.8 become available during Q1 2016, LKS and SI will evaluate the changes and make a determination on inclusion within the overall project scope.
 - Conversion of SAP BusinessWarehouse reporting to BI is not considered in scope and is being handled as part of the overall BI conversion effort.
 - Project hardware is to be purchased in Q1 2016.
 - Customer Services O&M was increased by \$2.8 million in 2016 and 2017 to ensure sustained business / customer metric performance. This incremental budget is allocated in the proposed 2016 BP.
 - Customer Services resources (12 FTEs) will be added for 28 months and 14 FTEs will backfill positions assigned to the project.
 - Routine annual capex for CCS in 2016-17 is \$2.5 \$3.5 million and will be avoided during the pending upgrade.
 - 2016 IT O&M increased \$150k for Annual Maintenance on SAP Suite on HANA Licenses, which is being offset by \$61k in reductions on other line items in the SAP annual license fee, for a net incremental cost of \$89k.
 - The economic useful life will continue on a 10-year depreciation schedule.

• Environmental

There are no environmental considerations for this project and Environmental Affairs is not required to sign-off on the project.

- Risks
 - Proceed with upgrade to ECC 6.7 and Reimplementation of CRM to 7.3:
 - Metrics Actual impacts to long-term transaction processing times are unknown based on the current data available.
 - Change Management (Training) Customer Services employees will be required to complete classroom, virtual, and eLearning training modules diverting those resources from day-to-day customer service tasks.
 - Change Management (Learning Curve) New processes will result in a shortterm dip in performance levels for all Customer Services areas and negatively impact operational metrics.
 - Do Nothing or Delay upgrade to CRM 7.3
 - Continued Deviation from Standard Functionality Some industry specific functionality delivered in CRM 7.3 (e.g., AMS) would require costly and high-risk customizations in CRM 5.2.
 - Data Replication Data replication issues will continue to impact data integrity.
 - System downtime As CRM 5.2 continues to age and levels of support decrease, the potential for CRM to experience an extended downtime increases.
 - Future program requirements As customer expectations and regulatory mandates increase, the need for advanced functionality increases significantly; "core code" modifications will likely be needed to meet emerging business needs, which significantly increases the risk of system failure.

- Compatibility with future operating systems and technology Continuously "back engineering" older versions of IT applications increases support costs and risk of an extended outage.
- Emerging Vendor Technologies Products of certified SAP partners and other vendors are limiting compatibility only to newer versions of SAP.

Conclusions and Recommendation

To continue as a leader in customer service and operational excellence, it is recommended LKS maximize the existing investment in the SAP customer platform and take advantage of new functionality and ongoing Enterprise level support by approving the SAP Upgrade to ECC 6.7, CRM 7.3 and Suite on HANA database platform. Investment Committee approval of this recommendation is requested for \$27.1 million.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 33

Responding Witness: John P. Malloy

- Q.1-33. Please provide the increase or savings that the Company expects to achieve in IT O&M expense and customer care expense as the result of the upgrade. Provide the expenses before and after the upgrade for the test year. Provide all assumptions, data, and calculations, including all electronic spreadsheets with formulas intact.
- A.1-33. As a result of the upgrade, the annual IT O&M expense related to the SAP customer care system is expected to increase by \$107,313. See attachment 1 being provided in Excel format. This is related to license fees and associated hardware maintenance fees needed for the new HANA database which is part of the upgrade. HANA is SAP's proprietary database platform; migrating to HANA is strategically important for continued use of SAP long-term. The upgrade will be implemented before the test year begins. The total SAP license fees in the test year are \$624,373. See attachment 2 being provided in Excel format.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 34

Responding Witness: John P. Malloy

- Q.1-34. Please provide the expected useful life of the CCS and the SAP upgrade, if different than for the CCS.
- A.1-34. See the response to Question No. 9.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 35

Responding Witness: Lonnie E. Bellar

- Q.1-35. Refer to page 20, lines 13-15, of Mr. Garrett's Direct Testimony wherein he describes an annual increase of \$10.7 million in steam and other generation maintenance expense due primarily to an increase in generation plant maintenance and outage expenses. Please provide a schedule showing the total company 2012, 2013, 2014, 2015, 2016, base year and test year maintenance expenses recorded or budgeted if not yet incurred for generation plant maintenance and outage expenses by plant/unit and by FERC O&M expense account.
- A.1-35. See attached.

Plant/Unit	FERC Account	2012	2013	2014	2015	2016	Base Year	Test Year
BROWN COMBUSTION TURBINE #6	551	12,382	10,438	7,311	4,488	4,406	6,611	9,505
	552	41,563	48,988	30,894	23,850	24,062	10,379	3,575
	553	184,497	117,169	295,017	233,353	202,580	100,403	809,941
	554	62,341	29,671	31,499	18,401	18,524	10,148	13,724
BROWN COMBUSTION TURBINE #7	551	9,846	8,336	9,864	4,478	4,406	4,991	-
	552	32,407	34,194	39,960	22,751	23,063	9,422	-
	553	149,813	11,383	198,429	11,800	74,937	35,158	-
	554	39,679	25,125	41,074	15,591	21,962	7,804	-
BROWN SOLAR FACILITY	554	-	-	-	-	3,110	2,234	96,018
CANAL	552	7,867	4,549	1,120	1,106	1,638	897	-
	554	4,992	1,200	1,154	-	13,059	8,830	-
CANE RUN 4 - GENERATION	510	837,329	340,382	254,776	110,248	-	-	-
	511 512	164,940	150,797	155,287	71,636 671,161	-	-	-
	512	4,480,295 2,322,972	1,789,243 715,931	2,215,430 413,321	199,009	-	-	-
	514	2,322,972	178,668	130,093	3,335,173	-	-	-
CANE RUN 5 - GENERATION	510	443,664	378,203	283,085	129,900			-
SAINE KON 5 - GENERATION	511	299,263	279,008	212,979	59,769		-	
	512	2,035,912	2,720,422	2,668,213	1,086,451			
	512	783,456	781,823	609,851	125,285	-	-	-
	514	232,307	198,520	144,547	4,182,033	-	-	-
CANE RUN 6 - GENERATION	510	770,575	542,090	405,755	172,977	10,575	10,575	-
	511	191,005	180,351	243,999	52,997	74,525	120,131	309,060
	512	4,238,654	2,854,239	2,778,745	341,341	1,715	1,712	-
	513	824,783	1,021,112	600,767	80,760	364	364	-
	514	332,973	284,545	207,185	439,097	10,781	(72)	-
CANE RUN CC GT 2016	551	-	-	-	12,291	97,488	114,983	247,192
	552	-	-	-	38,560	213,139	150,357	531,672
	553	-	-	-	107,398	397,470	61,818	704,707
	554	-	-	-	539,797	885,061	497,170	916,893
CANE RUN COMMON - GENERATION	510	-	-	-	-	-	15,606	25,200
	511	-	-	-	-	-	(117,778)	-
	514	-	-	-	-	-	15,117	9,443
CANE RUN GT11	552	1,185	5,040	1,405	-	6	1	-
	553	31,009	21,582	23,399	68,432	37,871	35,232	62,062
	554	-	2,480	3,992	1,158	254	132	-
E W BROWN COMBUSTION TURBINE UNIT 5	551	1,791	583	1,413	3,715	4,097	4,838	-
	552	7,673	3,027	6,058	20,799	26,576	13,715	-
	553	40,203	19,825	15,195	55,278	46,426	18,368	-
	554	7,170	13,544	5,757	54,152	17,591	5,780	-
LGE GENERATION - COMMON	510	-	-	-	-	-	-	(1)
MILL CREEK 1 - GENERATION	510 511	119,924	393,599	39,330	710,479	758,538	388,988 197,383	- 42,294
	512	219,615	207,774 7,701,724	352,491	419,369	551,303 4,057,625	,	· · ·
	512	4,038,653 899,791	3,971,556	4,237,184 459,815	6,871,243 874,612	4,037,823	2,836,940 638,569	2,063,060 1,131,487
	514	160,528	139,865	183,945	205,489	421,473	213,826	1,131,487
MILL CREEK 2 - GENERATION	510	499,247	101,298	9,030	678,553	758,538	388,988	-
MILE CREEK 2 * OENERATION	510	499,247 218,172	244,015	265,505	347,233	738,338 576,809	208,361	42,294
	512	7,058,811	3,828,597	6,734,374	5,193,138	4,504,287	3,181,772	3,956,710
	512		3,828,597	809,004	1,250,434	1,872,640	2,619,027	5,930,149
	513	3 636 450						5,750,147
	513 514	3,636,450 160 528		,				_
MILL CREEK 3 - GENERATION	514	160,528	139,865	183,945	205,489	419,271	211,859	-
MILL CREEK 3 - GENERATION	514 510	160,528 148,477	139,865 451,498	183,945 294,636	205,489 351,624	419,271 1,052,038	211,859 594,501	-
MILL CREEK 3 - GENERATION	514 510 511	160,528 148,477 254,289	139,865 451,498 237,840	183,945 294,636 394,542	205,489 351,624 456,962	419,271 1,052,038 719,210	211,859 594,501 268,608	- 42,294
MILL CREEK 3 - GENERATION	514 510	160,528 148,477	139,865 451,498	183,945 294,636	205,489 351,624	419,271 1,052,038	211,859 594,501	-

Attachiment to Response to KIUC-1 Question 35

Plant/Unit	FERC Account	2012	2013	2014	2015	2016	Base Year	Test Year
MILL CREEK 4 - GENERATION	510	182,741	139,187	196,128	595,428	1,408,141	956,034	-
	511	285,603	263,034	404,821	521,729	869,551	296,219	42,294
	512	7,740,023	6,794,763	9,884,708	6,466,034	7,459,953	6,108,559	2,143,157
	513	1,813,944	895,019	5,068,132	869,502	1,431,607	1,953,090	629,102
	514	244,614	213,127	280,297	313,126	648,039	323,053	-
MILL CREEK COMMON - GENERATION	510	-	-	-	-	-	1,500,916	3,697,838
	511	-	-	-	-	-	898,316	1,819,746
	512	-	-	-	-	-	4,868,432	9,117,913
	513	-	-	-	-	-	1,894,880	3,490,535
	514	-	-	-	-	-	794,547	729,130
MILL CREEK-SO2 UNIT 1	512	-	-	-	1,770	74,515	58,866	24,210
MILL CREEK-SO2 UNIT 2	512	-	-		1,770	74,515	58,866	24,210
MILL CREEK-SO2 UNIT 3	512	-	-	-	-		13,988	24,210
MILL CREEK-SO2 UNIT 4	512				-		13,988	24,210
PADDYS RUN GT 11	551	2,566	1,253	1,153			-	24,210
TADD IS KON OF IT	553	68,327	40,747	40,921	49,141	56,622	18,522	12,428
PADDYS RUN GT 12	553	23,186	47,053	26,328	58,077	79,984	30,180	62,050
PADDYS RUN GT 12 PADDYS RUN GT 13	551	- 23,180	- 47,055		8,948	17,097	8,266	02,030
FADUS KUN UL 15	552	- 6,746	- 3.687		8,948 3.649	9,873	8,200 154,740	-
	552 553	6,746 199,607	5,687 214,630	3,239 264,054	3,649 294,762	9,873 349,867	154,740 206,652	25,426 170,786
		,	,	,	,	,	,	,
	554	12,091	6,951	21,098	52,940	152,350	60,209	86,156
TRIMBLE COUNTY #10 COMBUSTION TURBINE	553	24,759	105,597	29,713	15,197	31,537	13,329	128,264
TRIMBLE COUNTY #5 - #10 COMBUSTION TURBINE - COMMON	553	-	-	-	-	-	-	1,127,447
TRIMBLE COUNTY #5 AND 6 COMBUSTION TURBINE - COMMON	553	-	-	-	-	-	-	139,415
TRIMBLE COUNTY #5 COMBUSTION TURBINE	553	86,502	59,642	160,950	130,973	148,036	86,884	(337,276)
TRIMBLE COUNTY #6 COMBUSTION TURBINE	553	64,114	38,043	79,696	110,877	109,433	73,666	157,920
TRIMBLE COUNTY #7 COMBUSTION TURBINE	553	31,244	27,775	37,985	158,511	72,495	43,439	(638,727)
TRIMBLE COUNTY #8 COMBUSTION TURBINE	553	40,730	73,621	57,436	54,897	38,725	21,454	128,264
TRIMBLE COUNTY #9 COMBUSTION TURBINE	553	58,532	20,535	44,453	38,795	55,978	55,509	120,264
TRIMBLE COUNTY 1 - 25% PORTION N/A	510	-	-	-	-	-	(32,625)	(218,744)
	511	-	-	-	-	-	(34,587)	(210,019)
	512	-	-	-	-	-	(136,544)	(1,416,220)
	513	-	-	-	-	-	(27,711)	(230,916)
	514	-	-	-	-	-	(15,671)	(86,707)
TRIMBLE COUNTY 1 - GENERATION	510	724,749	592,031	706,957	658,481	797,738	782,634	1,681,217
	511	841,816	606,246	788,448	872,054	874,031	848,504	840,075
	512	6,736,271	9,421,890	7,262,257	10,871,505	7,476,672	6,178,502	11,878,127
	513	829,932	1,341,425	789,987	2,235,946	988,126	767,074	1,733,659
	514	378,582	381,480	419,137	696,199	495,477	415,525	346,819
TRIMBLE COUNTY 2 - GENERATION	510	146,723	110,583	192,444	138,359	274,302	45,526	(771,325)
	511	282,027	181,382	199,726	226,187	219,561	412,839	1,260,110
	512	711,457	1,595,980	2,205,381	1,640,501	1,850,942	1,672,869	2,506,379
	513	319,590	232,974	311,752	211,847	506,536	495,726	340,959
	514	110,751	99,722	121,075	190,261	131,686	116,666	98,846
TRIMBLE COUNTY 2 CLEARING ACCTNG	510	(36,681)	(27,646)	(48,112)	(34,590)	(68,576)	(55,309)	(62,340)
	511	(70,507)	(45,346)	(49,932)	(56,547)	(54,891)	(42,442)	(59,853)
	512	(303,081)	(417,225)	(547,794)	(410,502)	(462,734)	(327,697)	(350,970)
	513	(79,898)	(58,244)	(77,938)	(52,962)	(126,635)	(117,631)	(53,179)
						(32,922)	(117,631) (20,990)	
TRIMPLE COUNTY CLEARING (A CCTNC)	514	(27,688)	(24,931)	(30,269)	(47,566)			(24,709)
TRIMBLE COUNTY CLEARING (ACCTNG)	510	(181,188)	(148,008)	(176,740)	(164,621)	(199,435)	(107,086)	-
	511	(210,454)	(151,562)	(197,112)	(218,014)	(218,508)	(127,466)	-
	512	(1,684,069)	(2,355,474)	(1,815,565)	(2,717,877)	(1,869,169)	(962,729)	-
	513	(207,483)	(335,357)	(197,497)	(558,987)	(247,032)	(111,256)	-
	514	(94,646)	(95,370)	(104,784)	(174,050)	(123,870)	(62,575)	-
ZORN	553	99,695	14,491	18,764	22,714	66,567	52,294	4,972

Attachment to Response to KIUC-1 Question 35 Page 2 of 2 Bellar

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 36

Responding Witness: Christopher M. Garrett

- Q.1-36. Please describe how the Company removed the effects of purchase accounting from the capitalization, all rate base components, and all related expenses, such as depreciation expense and property tax expense, reflected in the filing. Provide a schedule in electronic spreadsheet format with all formulas intact showing all adjustments and providing an explanation of each such adjustment.
- A.1-36. The Company maintains a separate general ledger and a separate budget entity to record the impact of all purchase accounting adjustments and to ensure that the activity can be tracked for reporting and budgeting purposes. When calculating capitalization, all rate base components and all related expenses, the Company used only the general ledger and budget entity excluding purchase accounting. As a result, there was no adjustment needed to remove purchase accounting included in the capitalization, rate base components, or all related expenses.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 37

Responding Witness: Valerie L. Scott

Q.1-37. Please provide a schedule showing all direct assignments and allocations of costs from LKS to the Company by FERC O&M, A&G, and each other account for 2012, 2013, 2014, 2015, 2016, the base year, and the test year. Provide an explanation for each increase from year to year of at least \$1 million or 5%, whichever is less.

A.1-37. See attached.

Changes from year to year are explained for increases greater than \$1 million.

FERC Account FERC Account Description Indirect Allocations 107 Construction Work In Progress 25,593,763 - 108 Accumulated Provision For Depreciation Of Utility Plant 179,737 - 131 Cash (1,127,829) - 143 Other Accounts Receivable 56,128 - 146 Accounts Receivable From Associated Companies (135,250) - 151 Fuel Stock 462,506,870 - 163 Stores Expense Undistributed 239,491 - 165 Prepayments 11,149,247 - 182.3 Other Regulatory Assets 1,281,133 - 183 Preliminary Survey And Investigation Charges 346,863 - 184 Clearing Accounts 23,329,599 -	ROM THE	SERVICE COMPANY (LKS)	1	2012	
FERC Account Direct FERC Account Description Direct Assignments Allocations of Costs 107 Construction Work In Progress 25,593,763 - 108 Accumulated Provision For Depreciation Of Utility Plant 179,737 - 131 Cash (1,127,829) - 143 Other Accounts Receivable 56,128 - 151 Fuel Stock (135,250) - 163 Stores Expense Undistributed 239,491 - 165 Prepayments 239,491 - 182.3 Other Regulatory Assets 1,281,133 - 183 Preliminary Survey And Investigation Charges 346,863 -					
AccountFERC Account DescriptionAssignmentsof Costs107Construction Work In Progress25,593,763-108Accumulated Provision For Depreciation Of Utility Plant179,737-131Cash(1,127,829)-143Other Accounts Receivable56,128-146Accounts Receivable From Associated Companies153,250)-151Fuel Stock462,506,870-163Stores Expense Undistributed239,491-165Prepayments11,149,247-182.3Other Regulatory Assets1,281,133-183Preliminary Survey And Investigation Charges346,863-	ERC		Direct		
107Construction Work In Progress25,593,763-108Accumulated Provision For Depreciation Of Utility Plant179,737-131Cash(1,127,829)-143Other Accounts Receivable56,128-146Accounts Receivable From Associated Companies(135,250)-151Fuel Stock462,506,870-163Stores Expense Undistributed239,491-165Prepayments11,149,247-182.3Other Regulatory Assets1,281,133-183Preliminary Survey And Investigation Charges346,863-		FERC Account Description			Total
131 Cash (1,127,829) - 143 Other Accounts Receivable 56,128 - 146 Accounts Receivable From Associated Companies (135,250) - 151 Fuel Stock 462,506,870 - 163 Stores Expense Undistributed 239,491 - 165 Prepayments 11,149,247 - 182.3 Other Regulatory Assets 1,281,133 - 183 Preliminary Survey And Investigation Charges 346,863 -	07		25,593,763	-	25,593,763
31Cash(1,127,829)-43Other Accounts Receivable56,128-46Accounts Receivable From Associated Companies(135,250)-51Fuel Stock462,506,870-63Stores Expense Undistributed239,491-65Prepayments11,149,247-82.3Other Regulatory Assets1,281,133-83Preliminary Survey And Investigation Charges346,863-					
31Cash(1,127,829)-43Other Accounts Receivable56,128-46Accounts Receivable From Associated Companies(135,250)-51Fuel Stock462,506,870-63Stores Expense Undistributed239,491-65Prepayments11,149,247-82.3Other Regulatory Assets1,281,133-83Preliminary Survey And Investigation Charges346,863-					
31Cash(1,127,829)-43Other Accounts Receivable56,128-46Accounts Receivable From Associated Companies(135,250)-51Fuel Stock462,506,870-63Stores Expense Undistributed239,491-65Prepayments11,149,247-82.3Other Regulatory Assets1,281,133-83Preliminary Survey And Investigation Charges346,863-					
131Cash(1,127,829)-143Other Accounts Receivable56,128-146Accounts Receivable From Associated Companies(135,250)-151Fuel Stock462,506,870-163Stores Expense Undistributed239,491-165Prepayments11,149,247-182.3Other Regulatory Assets1,281,133-183Preliminary Survey And Investigation Charges346,863-	08	Accumulated Provision For Depreciation Of Utility Plant	179.737	_	179,737
143Other Accounts Receivable56,128146Accounts Receivable From Associated Companies(135,250)151Fuel Stock462,506,870163Stores Expense Undistributed239,491165Prepayments11,149,247182.3Other Regulatory Assets1,281,133183Preliminary Survey And Investigation Charges346,863				-	(1,127,829)
51Fuel Stock462,506,870-63Stores Expense Undistributed239,491-65Prepayments11,149,247-82.3Other Regulatory Assets1,281,133-83Preliminary Survey And Investigation Charges346,863-					56,128
63 65Stores Expense Undistributed Prepayments239,491 - 11,149,247-82.3Other Regulatory Assets1,281,133-83Preliminary Survey And Investigation Charges346,863-	46	Accounts Receivable From Associated Companies	(135,250)	-	(135,250)
65Prepayments11,149,247-82.3Other Regulatory Assets1,281,133-83Preliminary Survey And Investigation Charges346,863-		*	462,506,870	-	462,506,870
82.3 Other Regulatory Assets 1,281,133 - 83 Preliminary Survey And Investigation Charges 346,863 -				-	239,491
83 Preliminary Survey And Investigation Charges 346,863 -	65	Prepayments	11,149,247	-	11,149,247
183 Preliminary Survey And Investigation Charges 346,863 -					
	82.3	Other Regulatory Assets	1,281,133	-	1,281,133
184 Clearing Accounts 23,329,599 -	83	Preliminary Survey And Investigation Charges	346,863	-	346,863
			23,329,599	-	23,329,599
186 Miscellaneous Deferred Debits 580,961 -			580,961	-	580,961
88 Research, Development And Demonstration Expenses - - 28.3 Accumulated Provision For Pensions And Benefits 6.475,046 -			- 6 475 046	-	- 6,475,046

	E SERVICE COMPANY (LKS)		2012				
			Indirect				
FERC		Direct	Allocations	-			
Account 232	FERC Account Description	Assignments	of Costs	Total			
252	Accounts Payable	186,349	-	186,349			
234	Accounts Payable To Associated Companies	-	-	-			
236	Taxes Accrued	(671,390)	-	(671,390)			
241	Tax Collections Payable	_	-	-			
242	Miscellaneous Current And Accrued Liabilities	640,684	-	640,684			
253	Other Deferred Credits	921,328	-	921,328			
400	Operating Revenues	-	-	-			
408.1	Taxes Other Than Income Taxes, Utility Operating Income	3,622,993	-	3,622,993			
408.2	Taxes Other Than Income Taxes, Other Income And Deductions	-	-	-			
416	Cost And Expenses Of Merchandising, Jobbing And Contract Work	-	-	-			
418	Nonoperating Rental Income	0	-	0			
419	Interest And Dividend Income	-	-	-			
421	Miscellaneous Nonoperating Income	3,473	-	3,473			
421.1	Gain On Disposition Of Property	-	-	-			
426.1	Donations	1,568,949	36,269	1,605,218			
426.3	Penalties	74,771	-	74,771			
426.4	Expenditures For Certain Civic, Political And Related Activities	69,656	737,337	806,993			
426.5	Other Deductions	739,863	107,765	847,628			
431	Other Interest Expense	-	-	-			
454	Rent From Electric Property	(0)	-	(0)			
456	Other Electric Revenues	24,890	-	24,890			
493	Rent From Gas Property	0	-	0			
500	Operation Supervision And Engineering	143,305	2,441,863	2,585,168			
501	Fuel	538,092	785,339	1,323,430			
502	Steam Expenses	130,973	16,635	1,525,450			
502 505	Electric Expenses	-	-	-			
506	Miscellaneous Steam Power Expenses	392,387	-	392,387			
510	Maintenance Supervision And Engineering	1,392,304	-	1,392,304			
511	Maintenance Of Structures	1,614	-	1,614			

	E SERVICE COMPANY (LKS)		2012					
			Indirect					
FERC		Direct	Allocations					
Account	FERC Account Description	Assignments	of Costs	Total				
512	Maintenance Of Boiler Plant	(21,689)	-	(21,689				
513	Maintenance Of Electric Plant	201,835	136,386	338,221				
514	Maintenance Of Miscellaneous Steam Plant	3,715	-	3,715				
535	Operation Supervision And Engineering	-	-	-				
538	Electric Expenses	-	-	-				
539	Miscellaneous Hydraulic Power Generation Expenses	4,120	-	4,120				
541	Maintenance Supervision And Engineering	344	-	344				
542	Maintenance Of Structures	9,153	-	9,153				
543	Maintenance Of Reservoirs, Dams And Waterways	3,698	-	3,698				
544	Maintenance Of Electric Plant	-	-	-				
545	Maintenance Of Miscellaneous Hydraulic Plant	-	-	-				
546	Operation Supervision And Engineering	-	-	-				
548	Generation Expenses	495	-	495				
549	Miscellaneous Other Power Generation Expenses	-	-	-				
551	Maintenance Supervision And Engineering	-	-	-				
552	Maintenance Of Structures	-	-	-				
553	Maintenance Of Generating And Electric Equipment	30,871	-	30,871				
554	Maintenance Of Miscellaneous Other Power Generation Plant	-	-	-				
556	System Control And Load Dispatching	243	1,509,070	1,509,313				
560	Operation Supervision And Engineering	36,322	777,269	813,591				
561.1	Load Dispatch-Reliability	(101)	1,693,083	1,692,982				
561.2	Load Dispatch-Monitor And Operate Transmission System	-	-	-				
561.3	Load Dispatch-Transmission Service And Scheduling	-	-	-				
561.5	Reliability, Planning And Standards Development	-	430,442	430,442				
561.6	Transmission Service Studies	6,827	-	6,827				
562	Station Expenses	37,589	-	37,589				
563	Overhead Line Expenses	34,062	-	34,062				
566	Miscellaneous Transmission Expenses	1,656,450	656,941	2,313,391				
567	Rents	300	-	300				
569	Maintenance Of Structures	-	-	-				
570	Maintenance Of Station Equipment	200,840	-	200,840				
571	Maintenance Of Overhead Lines	84,076	-	84,076				
573	Maintenance Of Miscellaneous Transmission Plant	-	-	-				
580	Operation Supervision And Engineering	1,101,925	82,993	1,184,918				
581	Load Dispatching	-	726,302	726,302				

FROM TH	E SERVICE COMPANY (LKS)	-					
		2012					
			Indirect				
FERC		Direct	Allocations				
Account	FERC Account Description	Assignments	of Costs	Total			
582	Station Expenses	305	-	305			
583	Overhead Line Expenses	122,454	-	122,454			
584	Underground Line Expenses	10,811	-	10,811			
585	Street Lighting And Signal System Expenses	-	-	-			
586	Meter Expenses	660,155	54,017	714,172			
587	Customer Installations Expenses	-	-	-			
588	Miscellaneous Distribution Expenses	1,033,675	363,240	1,396,915			
589	Rents	150	-	150			
590	Maintenance Supervision And Engineering	267	-	267			
591	Maintenance Of Structures	-	-	-			
592	Maintenance Of Station Equipment	4,456	-	4,456			
593	Maintenance Of Overhead Lines	87,744	-	87,744			
594	Maintenance Of Underground Lines	751	-	751			
595	Maintenance Of Line Transformers	243	-	243			
596	Maintenance Of Street Lighting And Signal Systems	-	-	-			
597	Maintenance Of Meters	-	-	-			
598	Maintenance Of Miscellaneous Distribution Plant	28,475		28,475			
807	Purchased Gas Expenses	83,242	-	83,242			
814	Operation Supervision And Engineering	-	-	- 05,242			
816	Wells Expenses			_			
817	Lines Expenses	(18)	_	(18			
818	Compressor Station Expenses	38,241	-	38,241			
821	Purification Expenses	19,382	-	19,382			
825	Storage Well Royalties	-	-	-			
830	Maintenance Supervision And Engineering	-	-	-			
832	Maintenance Of Reservoirs And Wells	14,876	-	14,876			
333	Maintenance Of Lines	,	-	-			
334	Maintenance Of Compressor Station Equipment	695	-	695			
835	Maintenance Of Measuring And Regulating Station Equipment	-	-	-			
836	Maintenance Of Purification Equipment	-	-	-			
837	Maintenance Of Other Equipment	-	-	-			
850	Operation Supervision And Engineering	-	-	-			

	E SERVICE COMPANY (LKS)	2012				
			Indirect			
FERC		Direct	Allocations			
Account	FERC Account Description	Assignments	of Costs	Total		
851	System Control And Load Dispatching	-	-	-		
356	Mains Expenses	2,070	-	2,070		
360	Rents	90	-	90		
63	Maintenance Of Mains	10,607	-	10,607		
71	Distribution Load Dispatching	1,580	-	1,580		
74	Mains And Services Expenses	15,680	-	15,680		
75	Measuring And Regulating Station Expenses-General	-	-	-		
76	Measuring And Regulating Station Expenses-Industrial	-	-	-		
377	Measuring And Regulating Station Expenses-City Gate Check Stations	3,233	-	3,233		
378	Meter And House Regulator Expenses	-	-	-		
79	Customer Installations Expenses	7,256	-	7,256		
80	Other Expenses	1,009,062	120,619	1,129,681		
881	Rents	60	-	60		
386	Maintenance Of Structures And Improvements	-	-	-		
87	Maintenance Of Mains	1,835	-	1,835		
89	Maintenance Of Measuring And Regulating Station Equipment-General	-	-	-		
90	Maintenance Of Measuring And Regulating Station Equipment-Industrial	-	-	-		
91	Maintenance Of Measuring And Regulating Station Equipment-City Gate Check Stations	-	-	-		
92	Maintenance Of Services	1,330	-	1,330		
93	Maintenance Of Meters And House Regulators	-	-	-,		
394	Maintenance Of Other Equipment	651	-	651		
01	Supervision	1,351,013	373,052	1,724,066		
02	Meter Reading Expenses	177,159	312	177,471		
03	Customer Records And Collection Expenses	4,485,479	4,773,451	9,258,930		
04	Uncollectible Accounts	-	-	-		
05	Miscellaneous Customer Accounts Expenses	382,482	-	382,482		
07	Supervision	60,708	182,838	243,546		
07	Customer Assistance Expenses	9,813,699	543,260	10,356,959		
00		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.10,200	10,000,000		
09	Informational And Instructional Advertising Expenses	203,819	-	203,819		
10	Miscellaneous Customer Service And Informational Expenses	185,774	373,371	559,145		
12	Demonstrating And Selling Expenses	-	-	-		
13	Advertising Expenses	1,823	-	1,823		
20	Administrative And General Salaries	2,411,165	18,324,357	20,735,522		
913 920		· · ·				

	E SERVICE COMPANY (LKS)		2012 Indirect	
FERC Account	FERC Account Description	Direct Assignments	Allocations of Costs	Total
221	Office Supplies And Expenses	2,194,049	4,676,369	6,870,418
23	Outside Services Employed	2,941,567	2,275,529	5,217,095
24	Property Insurance	113,742	-	113,742
25	Injuries And Damages	552,014	3,462	555,476
926	Employee Pensions And Benefits	15,001,864	152,991	15,154,855
928 930.1 930.2	Regulatory Commission Expenses General Advertising Expenses Miscellaneous General Expenses	573,300 333,659	38,343 620,443	611,643 954,103

				2012		
FERC Account		FERC Account Description	Direct Assignments	Indirect Allocations of Costs	Total	
931	Rents	•	196	362,661	362,857	
935	Maintenance Of General Plant		15,988	11,819,739	11,835,727	
Grand Tota	al		587,605,932	55,195,747	642,801,680	

FROM TH	E SERVICE COMPANY (LKS)	_				
			2013			Variance 2013 to 2012
			Indirect			
FERC		Direct	Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
107	Construction Work In Progress	32,382,034	-	32,382,034	6,788,271	Increases due primarily to new transmission lines, software upgrades/replacements/licenses, telecommunication/IT infrastructure improvements and Mill Creek environmental projects.
108	Accumulated Provision For Depreciation Of Utility Plant	285,054	-	285,054	105,317	
131	Cash	(1,845,864)	-	(1,845,864)	(718,035)	
143	Other Accounts Receivable	26	-	26	(56,103)	
146	Accounts Receivable From Associated Companies	-	-	-	135,250	
151	Fuel Stock	455,406,078	-	455,406,078	(7,100,792)	
163	Stores Expense Undistributed	312,583	-	312,583	73,092	
165	Prepayments	8,155,029	-	8,155,029	(2,994,219)	
182.3	Other Regulatory Assets	78,099	-	78,099	(1,203,034)	
183 184	Preliminary Survey And Investigation Charges Clearing Accounts	439,778 23,615,793	-	439,778 23,615,793	92,915 286,193	
186	Miscellaneous Deferred Debits	472,368	-	472,368	(108,592)	
188 228.3	Research, Development And Demonstration Expenses Accumulated Provision For Pensions And Benefits	- 4,348,755	-	- 4,348,755	- (2,126,291)	
220.3	Accumulated 1 Iovision For Fensions And Denemis	4,348,733	-	4,340,733	(2,120,291)	

			2013			Variance 2013 to 2012
FERC		Direct	Indirect Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
232	Accounts Payable	2,445,576	-	2,445,576	2,259,226	Due to payment of 2011 and 2012 Emission Fees for Cane Run and Mill Creek.
234	Accounts Payable To Associated Companies	_	-	-	-	
236	Taxes Accrued	(711,740)	-	(711,740)	(40,350)	
241	Tax Collections Payable	-	-	-	-	
242	Miscellaneous Current And Accrued Liabilities	799,764	-	799,764	159,080	
253	Other Deferred Credits	659,949	-	659,949	(261,379)	
400	Operating Revenues	-	-	-	-	
408.1	Taxes Other Than Income Taxes, Utility Operating Income	3,738,358	-	3,738,358	115,365	
408.2	Taxes Other Than Income Taxes, Other Income And Deductions	-	-	-	-	
416	Cost And Expenses Of Merchandising, Jobbing And Contract Work	-	-	-	-	
418	Nonoperating Rental Income	-	-	-	(0)	
419	Interest And Dividend Income	(2)	-	(2)	(2)	
421	Miscellaneous Nonoperating Income	-	-	-	(3,473)	
421.1	Gain On Disposition Of Property	-	-	-	-	
426.1	Donations	1,939,908	97,941	2,037,850	432,632	
426.3	Penalties	129,426	-	129,426	54,655	
426.4	Expenditures For Certain Civic, Political And Related Activities	69,861	818,329	888,190	81,197	
426.5	Other Deductions	762,288	195,849	958,138	110,510	
431	Other Interest Expense	-	-	-	-	
454	Rent From Electric Property	-	-	-	0	
456	Other Electric Revenues	19,933	-	19,933	(4,957)	
493	Rent From Gas Property	-	-	-	(0)	
500	Operation Supervision And Engineering	151,728	2,954,955	3,106,683	521,515	
501	Fuel	520,941	824,846	1,345,788	22,357	
502	Steam Expenses	113,848	11,986	125,834	(21,774)	
505	Electric Expenses	803	-	803	803	
506	Miscellaneous Steam Power Expenses	234,288	-	234,288	(158,099)	
510	Maintenance Supervision And Engineering	410,670	132,287	542,957	(849,347)	
511	Maintenance Of Structures	162,109	-	162,109	160,495	

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FROM TH	E SERVICE COMPANY (LKS)	-				
			2013		Vari	ance 2013 to 2012
			Indirect			
FERC		Direct	Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
512	Maintenance Of Boiler Plant	75,031	-	75,031	96,720	
513	Maintenance Of Electric Plant	159,745	268,345	428,091	89,870	
514	Maintenance Of Miscellaneous Steam Plant	22,662	-	22,662	18,947	
535	Operation Supervision And Engineering	-	-	-	-	
538	Electric Expenses	-	-	-	-	
539	Miscellaneous Hydraulic Power Generation Expenses	4,540	-	4,540	421	
541	Maintenance Supervision And Engineering	-	-	-	(344)	
542	Maintenance Of Structures	13,966	-	13,966	4,813	
543	Maintenance Of Reservoirs, Dams And Waterways	-	-	-	(3,698)	
544	Maintenance Of Electric Plant	-	-	-	-	
545	Maintenance Of Miscellaneous Hydraulic Plant	-	-	-	-	
546	Operation Supervision And Engineering	-	-	-	-	
548	Generation Expenses	221	-	221	(274)	
549	Miscellaneous Other Power Generation Expenses	-	-	-	-	
551	Maintenance Supervision And Engineering	-	-	-	-	
552	Maintenance Of Structures	-	-	-	-	
553	Maintenance Of Generating And Electric Equipment	821	-	821	(30,050)	
554	Maintenance Of Miscellaneous Other Power Generation Plant	-	-	-	-	
556	System Control And Load Dispatching	-	1,403,557	1,403,557	(105,756)	
560	Operation Supervision And Engineering	49,741	798,454	848,195	34,604	
561.1	Load Dispatch-Reliability	-	1,843,473	1,843,473	150,491	
561.2	Load Dispatch-Monitor And Operate Transmission System	-	-	-	-	
561.3	Load Dispatch-Transmission Service And Scheduling	-	-	-	-	
561.5	Reliability, Planning And Standards Development	-	490,511	490,511	60,069	
61.6	Transmission Service Studies	8,081	-	8,081	1,254	
562	Station Expenses	27,787	-	27,787	(9,802)	
63	Overhead Line Expenses	29,699	-	29,699	(4,363)	
666	Miscellaneous Transmission Expenses	911,225	326,340	1,237,564	(1,075,827)	
67	Rents	3,332	-	3,332	3,032	
69	Maintenance Of Structures	-	-	-	-	
570	Maintenance Of Station Equipment	178,786	15,527	194,314	(6,527)	
571	Maintenance Of Overhead Lines	52,418	-	52,418	(31,658)	
73	Maintenance Of Miscellaneous Transmission Plant	12,251	5,793	18,044	18,044	
580	Operation Supervision And Engineering	648,124	377,241	1,025,366	(159,552)	
581	Load Dispatching	-	754,355	754,355	28,053	

			2013		Variance 2013 to 2012		
			Indirect				
FERC		Direct	Allocations		Variance		
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation	
582	Station Expenses	13,128	-	13,128	12,823		
583	Overhead Line Expenses	480,944	-	480,944	358,491		
584	Underground Line Expenses	-	-	-	(10,811)		
585	Street Lighting And Signal System Expenses	-	-	-	-		
586	Meter Expenses	698,710	19,999	718,709	4,537		
587	Customer Installations Expenses	-	-	-	_		
588	Miscellaneous Distribution Expenses	851,650	393,361	1,245,010	(151,904)		
589	Rents	1,666	-	1,666	1,516		
590	Maintenance Supervision And Engineering	761	897	1,658	1,391		
591	Maintenance Of Structures	-	-	-	-		
592	Maintenance Of Station Equipment	3,117	-	3,117	(1,340)		
593	Maintenance Of Overhead Lines	86,914	-	86,914	(829)		
594	Maintenance Of Underground Lines	-	-	-	(751)		
595	Maintenance Of Line Transformers	-	-	-	(243)		
596	Maintenance Of Street Lighting And Signal Systems	-	-	-	-		
597	Maintenance Of Meters	-	-	-	-		
598	Maintenance Of Miscellaneous Distribution Plant	6,843		6,843	(21,632)		
398 307	Purchased Gas Expenses	6,748	-	6,748	(76,494)		
814	Operation Supervision And Engineering	-	_	-	-		
814 816	Wells Expenses	8,650	_	8,650	8,650		
317 317	Lines Expenses	-	_	-	18		
818	Compressor Station Expenses	61,139	-	61,139	22,898		
321	Purification Expenses	34,205	-	34,205	14,823		
325	Storage Well Royalties	105	-	105	105		
330	Maintenance Supervision And Engineering	-	-	-	-		
332	Maintenance Of Reservoirs And Wells	-	-	-	(14,876)		
333	Maintenance Of Lines	-	-	-	-		
334	Maintenance Of Compressor Station Equipment	1,018	-	1,018	322		
835	Maintenance Of Measuring And Regulating Station Equipment	-	-	-	-		
836	Maintenance Of Purification Equipment	(171)	-	(171)	(171)		
837	Maintenance Of Other Equipment	-	-	-	-		
850	Operation Supervision And Engineering	-	-	-	-		

			2013			Variance 2013 to 2012
			Indirect			
FERC		Direct	Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
851	System Control And Load Dispatching	-	-	-	-	
856	Mains Expenses	2,019	-	2,019	(51)	
860	Rents	1,000	-	1,000	910	
863	Maintenance Of Mains	8,418	-	8,418	(2,189)	
871	Distribution Load Dispatching	-	-	-	(1,580)	
874	Mains And Services Expenses	4,252	-	4,252	(11,428)	
875	Measuring And Regulating Station Expenses-General	-	-	-	-	
876	Measuring And Regulating Station Expenses-Industrial	-	-	-	-	
877	Measuring And Regulating Station Expenses-City Gate Check Stations	3,203	-	3,203	(31)	
878	Meter And House Regulator Expenses	1,906	-	1,906	1,906	
879	Customer Installations Expenses	-	-	-	(7,256)	
880	Other Expenses	866,715	43,706	910,421	(219,260)	
881	Rents	666	-	666	606	
886	Maintenance Of Structures And Improvements	-	-	-	-	
887	Maintenance Of Mains	141,826	-	141,826	139,991	
889	Maintenance Of Measuring And Regulating Station Equipment-General	-	-	-	-	
890	Maintenance Of Measuring And Regulating Station Equipment-Industrial	-	-	-	-	
891	Maintenance Of Measuring And Regulating Station Equipment-City Gate Check Stations	-	-	-	-	
892	Maintenance Of Services	103	-	103	(1,227)	
893	Maintenance Of Meters And House Regulators	-	-	-	-	
894	Maintenance Of Other Equipment	-	-	-	(651)	
901	Supervision	1,637,927	324,660	1,962,587	238,521	
902	Meter Reading Expenses	131,649	73,620	205,269	27,797	
903	Customer Records And Collection Expenses	4,351,746	4,686,434	9,038,180	(220,750)	
904	Uncollectible Accounts	-	-	-	-	
905	Miscellaneous Customer Accounts Expenses	43,173	-	43,173	(339,309)	
907	Supervision	40,260	215,671	255,931	12,385	
908	Customer Assistance Expenses	11,505,276	494,154	11,999,431	1,642,472	Primarily due to purchase of CFL light bulbs for the Residential DSM program in 2013.
909	Informational And Instructional Advertising Expenses	462,729	-	462,729	258,910	
910	Miscellaneous Customer Service And Informational Expenses	218,617	213,556	432,173	(126,972)	
912	Demonstrating And Selling Expenses	41,970	-	41,970	41,970	
913	Advertising Expenses	-	-	-	(1,823)	
920	Administrative And General Salaries	2,041,420	23,246,310	25,287,730	4,552,208	Primarily due to a change in account number charged by IT employees (offset in Account 935 below); and annual wage increases.

	E SERVICE COMPANY (LKS)		2013			Variance 2013 to 2012
FERC Account	FERC Account Description	Direct Assignments	Indirect Allocations of Costs	Total	Variance Amount	Explanation
921	Office Supplies And Expenses	1,749,860	4,446,610	6,196,470	(673,947)	
23	Outside Services Employed	4,328,834	10,366,780	14,695,614	9,478,519	Primarily due to a change in accoun number charged by IT employees (offset in Account 935 below).
24	Property Insurance	159,140	14,012	173,151	59,409	
25	Injuries And Damages	631,404	24,046	655,450	99,974	
26	Employee Pensions And Benefits	16,453,075	166,555	16,619,630	1,464,776	Increased pension and medical insurance costs.
28 30.1 30.2	Regulatory Commission Expenses General Advertising Expenses Miscellaneous General Expenses	679,492 275,711	69,243 875,388	748,735 1,151,098	- 137,092 196,996	

			2013		Va	riance 2013 to 2012
			Indirect			
FERC		Direct	Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
931	Rents	(196)	202,624	202,428	(160,429)	
35	Maintenance Of General Plant	45,880	4,158,003	4,203,883	(7,631,844)	
Frand Tota	al	585,379,372	61,355,418	646,734,790	3,933,110	

FROM TH	E SERVICE COMPANY (LKS)	I I	2014			Variance 2014 to 2013
FERC Account	FERC Account Description	Direct Assignments	Indirect Allocations of Costs	Total	Variance Amount	Explanation
107	Construction Work In Progress	10,308,464	17,604,537	27,913,001	(4,469,033)	
108	Accumulated Provision For Depreciation Of Utility Plant	310,143	98,949	409,092	124,038	
131 143	Cash Other Accounts Receivable	(1,089,570) 25,459		(1,089,570) 23,350	756,294 23,325	
145 146	Accounts Receivable From Associated Companies	4,073	(2,109) (337)	23,330	3,736	
151	Fuel Stock	457,984,049	-	457,984,049		Slightly higher coal prices and higher reagent prices and volumes.
163	Stores Expense Undistributed	16,501	287,041	303,542	(9,041)	
165	Prepayments	10,410,625	839,623	11,250,248	3,095,219	Difference caused by timing issue of premium being paid in Jan-14 instead of Dec-13.
182.3	Other Regulatory Assets	501,464	-	501,464	423,365	
183 184	Preliminary Survey And Investigation Charges Clearing Accounts	134,649 21,744,750	576 1,914,998	135,224 23,659,748	(304,553) 43,956	
186 188	Miscellaneous Deferred Debits Research, Development And Demonstration Expenses	348,667	18	348,685	(123,683)	
228.3	Accumulated Provision For Pensions And Benefits	4,396,571	-	4,396,571	47,816	

			2014		Varia	ance 2014 to 2013
FERC		Direct	Indirect Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
232	Accounts Payable	339,763	-	339,763	(2,105,813)	
34 36	Accounts Payable To Associated Companies Taxes Accrued	(248,204) (715,363)	-	(248,204) (715,363)	(248,204) (3,623)	
50		(715,505)		(115,505)	(3,023)	
41	Tax Collections Payable	(4)	-	(4)	(4)	
42	Miscellaneous Current And Accrued Liabilities	1,012,408	-	1,012,408	212,644	
53	Other Deferred Credits	(12,774)	1,350,360	1,337,586	677,637	
00	Operating Revenues	-	-	-	-	
08.1	Taxes Other Than Income Taxes, Utility Operating Income	3,811,764	-	3,811,764	73,406	
08.2	Taxes Other Than Income Taxes, Other Income And Deductions	710	-	710	710	
16	Cost And Expenses Of Merchandising, Jobbing And Contract Work	-	-	-	-	
18	Nonoperating Rental Income	-	-	-	-	
19	Interest And Dividend Income	-	-	-	2	
21	Miscellaneous Nonoperating Income	-	-	-	-	
21.1	Gain On Disposition Of Property	-	-	-	-	
26.1	Donations	2,300,905	42,625	2,343,530	305,680	
26.3	Penalties	77,751	14,992	92,744	(36,682)	
26.4	Expenditures For Certain Civic, Political And Related Activities Other Deductions	168,805	576,140	744,945	(143,245)	
26.5		683,994	320,312	1,004,306	46,169	
31 54	Other Interest Expense Rent From Electric Property	-	-	-	-	
54 56	Other Electric Revenues	20,421	-	20,421	- 488	
50 93	Rent From Gas Property	- 20,421	-	- 20,421	400	
93 00	Operation Supervision And Engineering	359,277	2,803,731	3,163,008	56,325	
	Operation Supervision And Engineering	559,211	2,003,731	5,105,008	30,323	
01	Fuel	108,288	1,234,284	1,342,572	(3,215)	
02	Steam Expenses	122,225	9,702	131,927	6,093	
05	Electric Expenses	-	-	-	(803)	
06	Miscellaneous Steam Power Expenses	375,217	6,534	381,751	147,463	
510	Maintenance Supervision And Engineering	(187,387)	184,582	(2,804)	(545,762)	
511	Maintenance Of Structures	159,720	88	159,808	(2,301)	

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FROM TH	E SERVICE COMPANY (LKS)			1		
			2014		Varia	ance 2014 to 2013
			Indirect			
FERC		Direct	Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
512	Maintenance Of Boiler Plant	52,449	2,005	54,455	(20,576)	
513	Maintenance Of Electric Plant	389,592	51,283	440,875	12,784	
514	Maintenance Of Miscellaneous Steam Plant	6,205	122	6,327	(16,335)	
35	Operation Supervision And Engineering	-	-	-	-	
38	Electric Expenses	-	-	-	-	
39	Miscellaneous Hydraulic Power Generation Expenses	10,592	-	10,592	6,051	
41	Maintenance Supervision And Engineering	-	-	-	-	
42	Maintenance Of Structures	9,913	-	9,913	(4,053)	
43	Maintenance Of Reservoirs, Dams And Waterways	-	-	-	-	
44	Maintenance Of Electric Plant	330	5	335	335	
45	Maintenance Of Miscellaneous Hydraulic Plant	-	-	-	-	
46	Operation Supervision And Engineering	-	-	-	-	
48	Generation Expenses	4,800	-	4,800	4,579	
49	Miscellaneous Other Power Generation Expenses	-	-	-	-	
51	Maintenance Supervision And Engineering	-	-	-	-	
52	Maintenance Of Structures	-	-	-	-	
53	Maintenance Of Generating And Electric Equipment	865	-	865	44	
54	Maintenance Of Miscellaneous Other Power Generation Plant	1,546	43	1,589	1,589	
56	System Control And Load Dispatching	32,496	1,339,994	1,372,490	(31,067)	
60	Operation Supervision And Engineering	91,152	763,517	854,670	6,475	
61.1	Load Dispatch-Reliability	649,885	876,524	1,526,409	(317,064)	
61.2	Load Dispatch-Monitor And Operate Transmission System	78,738	57,628	136,366	136,366	
51.3	Load Dispatch-Transmission Service And Scheduling	23,310	53,571	76,880	76,880	
61.5	Reliability, Planning And Standards Development	45,791	409,177	454,968	(35,542)	
51.6	Transmission Service Studies	9,785	173	9,958	1,878	
52	Station Expenses	26,075	1,233	27,307	(479)	
53	Overhead Line Expenses	2,804	31	2,835	(26,864)	
66	Miscellaneous Transmission Expenses	46,786	1,221,845	1,268,630	31,066	
67	Rents	3,500	-	3,500	168	
59	Maintenance Of Structures	-	-	-	_	
70	Maintenance Of Station Equipment	54,712	102,697	157,409	(36,905)	
71	Maintenance Of Overhead Lines	37,004	2,095	39,100	(13,319)	
		.,	,	,	< · /	
73	Maintenance Of Miscellaneous Transmission Plant	-	91,400	91,400	73,356	
80	Operation Supervision And Engineering	265,172	806,536	1,071,708	46,342	
581	Load Dispatching	433,698	346,111	779,809	25,454	

			2014			Variance 2014 to 2013
			Indirect			
FERC		Direct	Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
82	Station Expenses	22,566	255	22,821	9,693	
583	Overhead Line Expenses	2,753,236	7,936	2,761,172	2,280,227	Variance due primarily to storm
						expenses.
584	Underground Line Expenses	-	-	-	-	
85	Street Lighting And Signal System Expenses	-	-	-	-	
586	Meter Expenses	127,036	488,101	615,137	(103,572)	
587	Customer Installations Expenses	_	_	-	-	
88	Miscellaneous Distribution Expenses	653,701	893,754	1,547,456	302,445	
89	Rents	1,750	-	1,750	84	
90	Maintenance Supervision And Engineering	8,850	4,634	13,484	11,826	
91	Maintenance Of Structures	-	-	-	-	
92	Maintenance Of Station Equipment	11,454	42	11,496	8,379	
93	Maintenance Of Overhead Lines	337,155	99,221	436,376	349,461	
94	Maintenance Of Underground Lines	3,396	-	3,396	3,396	
95	Maintenance Of Line Transformers	105	-	105	105	
596	Maintenance Of Street Lighting And Signal Systems	-	-	-	-	
597	Maintenance Of Meters	-	-	-	-	
598	Maintenance Of Miscellaneous Distribution Plant	427.907	1,131	429,037	422,195	
07	Purchased Gas Expenses	81,008	-	81,008	74,259	
514	Operation Supervision And Engineering	425	_	425	425	
14	Wells Expenses	425	_	423 154	(8,496)	
17	Lines Expenses	6,405	-	6,405	6,405	
18	Compressor Station Expenses	68,341	-	68,341	7,202	
21	Purification Expenses	18,571	-	18,571	(15,633)	
25	Storage Well Royalties	-	-	-	(105)	
30	Maintenance Supervision And Engineering	-	-	-	-	
32	Maintenance Of Reservoirs And Wells	-	-	-	-	
33	Maintenance Of Lines	1,997	-	1,997	1,997	
34	Maintenance Of Compressor Station Equipment	-	-	-	(1,018)	
35	Maintenance Of Measuring And Regulating Station Equipment	-	-	-	-	
36	Maintenance Of Purification Equipment	-	-	-	171	
37	Maintenance Of Other Equipment	4,920	-	4,920	4,920	
350	Operation Supervision And Engineering	294,388	18,820	313,208	313,208	

			2014			Variance 2014 to 2013
			Indirect			
FERC		Direct	Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
51	System Control And Load Dispatching	102	-	102	102	
56	Mains Expenses	1,729	208	1,938	(81)	
50	Rents	1,050	-	1,050	50	
53	Maintenance Of Mains	9,652	77	9,729	1,311	
71	Distribution Load Dispatching	-	-	-	-	
74	Mains And Services Expenses	10,572	2,826	13,398	9,147	
75	Measuring And Regulating Station Expenses-General	224	-	224	224	
76	Measuring And Regulating Station Expenses-Industrial	-	-	-	-	
77	Measuring And Regulating Station Expenses-City Gate Check Stations	126	-	126	(3,077)	
78	Meter And House Regulator Expenses	232	-	232	(1,674)	
79	Customer Installations Expenses	-	-	-	-	
30	Other Expenses	444,771	2,370	447,141	(463,279)	
31	Rents	700	-	700	34	
36	Maintenance Of Structures And Improvements	-	-	-	-	
37	Maintenance Of Mains	187,267	5,131	192,398	50,572	
39	Maintenance Of Measuring And Regulating Station Equipment-General	-	-	-	-	
00	Maintenance Of Measuring And Regulating Station Equipment-Industrial	-	-	-	-	
91	Maintenance Of Measuring And Regulating Station Equipment-City Gate Check Stations	-	-	-	-	
92	Maintenance Of Services	147,973	-	147,973	147,870	
93	Maintenance Of Meters And House Regulators	-	-	-	-	
94	Maintenance Of Other Equipment	-	-	-	-	
)1	Supervision	276,346	1,692,457	1,968,803	6,216	
02	Meter Reading Expenses	59,794	164,262	224,056	18,788	
)3	Customer Records And Collection Expenses	3,927,053	5,788,892	9,715,945	677,765	
)4	Uncollectible Accounts	-	-	-	-	
)5	Miscellaneous Customer Accounts Expenses	8,896	907	9,803	(33,370)	
)7	Supervision	3,227	273,168	276,395	20,464	
)8	Customer Assistance Expenses	11,174,719	206,827	11,381,545	(617,885)	
19	Informational And Instructional Advertising Expenses	419,462	38,767	458,229	(4,500)	
0	Miscellaneous Customer Service And Informational Expenses	555,559	291	555,850	123,676	
2	Demonstrating And Selling Expenses	-	-	-	(41,970)	
3	Advertising Expenses	58,659	3,962	62,621	62,621	
20	Administrative And General Salaries	1,964,561	28,448,428	30,412,989		Primarily due to a change in accound number charged by IT employees (offset in Account 935 below); and annual wage increases.

			2014			Variance 2014 to 2013
FERC		D : (Indirect		Variance	
Account	FERC Account Description	Direct Assignments	Allocations of Costs	Total	Amount	Explanation
921	Office Supplies And Expenses	1,309,522	6,128,317	7,437,838		Variance is primarily due to a change in the manner of charging expenses related to jointly used facilities' operations and maintenance. In 2014, these expenses were captured on LKS and then allocated to the utilities. Prior to 2013, these costs did not run through LKS.
923	Outside Services Employed	6,777,337	11,862,959	18,640,296	3,944,682	Variance primarily due to an increase in IT maintenance contracts, higher legal fees, and the change in outsourced mail services from direct billing to the utilities in 2013 to paid by LKS in 2014.
924	Property Insurance	-	191,749	191,749	18,598	
925	Injuries And Damages	1,077,599	119,025	1,196,624	541,175	
926	Employee Pensions And Benefits	12,806,744	174,133	12,980,877	(3,638,753)	
928 930.1 930.2	Regulatory Commission Expenses General Advertising Expenses Miscellaneous General Expenses	57,926 1,079,856 (536,649)	- 1,328 1,651,037	57,926 1,081,184 1,114,388	57,926 332,449 (36,710)	

			2014			Variance 2014 to 2013
			Indirect			
FERC		Direct	Allocations		Variance	
Account	FERC Account Description	Assignments	of Costs	Total	Amount	Explanation
931	Rents	37,182	1,168,783	1,205,965		Change in methodology for handling facilities allocations. Prior to 2014, rent for the LG&E Center was charged to LG&E from the holding company. In 2014, the rent was
935	Maintenance Of General Plant	259,489	565,224	824,712	(3,379,171)	charged from LKS.
Grand Tota	1	562,695,603	93,417,660	656,113,262	9,378,473	

110001111	E SERVICE COMPANY (EKS)		2015			Variance 2015 to 2014
FERC Account	FERC Account Description	Direct Assignments	Indirect Allocations of Costs	Total	Variance Amount	Explanation
107	Construction Work In Progress	15,776,547	17,029,918	32,806,465	4,893,464	Explanation
107		10,770,047	17,022,010	32,000,403	4,055,404	Increases due primarily to IT projects (infrastructure improvements, network/software upgrades, data warehouse improvements, Facility Inspection and Maintenance System replacement), environmental compliance at Mill Creek and Trimble County and Advanced Metering System Opt-In.
108	Accumulated Provision For Depreciation Of Utility Plant	439,772	278,660	718,433	309,341	
131	Cash	(257,469)	-	(257,469)	832,101	
143	Other Accounts Receivable	9,892	62	9,955	(13,395)	
146	Accounts Receivable From Associated Companies	-	-	-	(3,736)	
151	Fuel Stock	416,180,767	-	416,180,767	(41,803,282)	
163	Stores Expense Undistributed	208,114	591,530	799,643	496,101	
165	Prepayments	3,743,251	6,112,886	9,856,137	(1,394,111)	
182.3	Other Regulatory Assets	1,625,120	-	1,625,120	1,123,656	Primarily due to the establishment of regulatory asset for 15-year amortization of pensions as a result of Case No. 2014-00372.
183	Preliminary Survey And Investigation Charges	198,528	1,430	199,958	64,734	
184	Clearing Accounts	14,871,391	9,972,189	24,843,580		Variance due to the function of the clearing account. This increase is offset in other accounts.
186	Miscellaneous Deferred Debits	263,442	-	263,442	(85,243)	
188	Research, Development And Demonstration Expenses	-	26,435	26,435	26,435	
228.3	Accumulated Provision For Pensions And Benefits	4,604,727	-	4,604,727	208,156	

			2015	Variance 2015 to 2014		
			Indirect			
FERC			Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
32	Accounts Payable	1,233,728	-	1,233,728	893,965	
34	Accounts Payable To Associated Companies	-	-	-	248,204	
36	Taxes Accrued	(980,453)	-	(980,453)	(265,090)	
41	Tax Collections Payable	-	-	-	4	
42	Miscellaneous Current And Accrued Liabilities	994,975	-	994,975	(17,433)	
.53	Other Deferred Credits	543,735	826,691	1,370,426	32,840	
00	Operating Revenues	-	-	-	-	
08.1	Taxes Other Than Income Taxes, Utility Operating Income	3,252,722	770,928	4,023,650	211,886	
08.2	Taxes Other Than Income Taxes, Other Income And Deductions	307	-	307	(402)	
16	Cost And Expenses Of Merchandising, Jobbing And Contract Work	-	-	-	-	
8	Nonoperating Rental Income	-	-	-	-	
19	Interest And Dividend Income	(5)	-	(5)	(5)	
21	Miscellaneous Nonoperating Income	-	-	-	-	
21.1	Gain On Disposition Of Property	-	-	-	-	
26.1	Donations	2,950,065	241,175	3,191,240	847,710	
26.3	Penalties	-	5,166	5,166	(87,577)	
26.4	Expenditures For Certain Civic, Political And Related Activities	13,929	490,907	504,836	(240,109)	
26.5	Other Deductions	789,402	456,958	1,246,359	242,053	
31	Other Interest Expense	-	-	-	-	
54	Rent From Electric Property	-	-	-	-	
56	Other Electric Revenues	128	-	128	(20,293)	
93	Rent From Gas Property	-	-	-	-	
0	Operation Supervision And Engineering	158,489	3,534,650	3,693,139	530,131	
01	Fuel	444,822	892,319	1,337,141	(5,432)	
02	Steam Expenses	124,122	15,113	139,235	7,308	
)2)5	Electric Expenses	-	-	-	-	
)6	Miscellaneous Steam Power Expenses	666,557	391,176	1,057,734	675,982	
10	Maintenance Supervision And Engineering	(57,340)	385,332	327,992	330,796	
511	Maintenance Of Structures	148,050	41	148,091	(11,717)	

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			2015		Variance 2015 to 2014		
			Indirect				
FERC		Direct	Allocations of		Variance		
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation	
512	Maintenance Of Boiler Plant	181,627	1,641	183,269	128,814		
13	Maintenance Of Electric Plant	83,551	119,636	203,187	(237,688)		
14	Maintenance Of Miscellaneous Steam Plant	69,722	1,412	71,133	64,807		
35	Operation Supervision And Engineering	-	-	-	-		
38	Electric Expenses	-	-	-	-		
9	Miscellaneous Hydraulic Power Generation Expenses	1,389	-	1,389	(9,202)		
1	Maintenance Supervision And Engineering	-	-	-	-		
2	Maintenance Of Structures	3,216	-	3,216	(6,697)		
3	Maintenance Of Reservoirs, Dams And Waterways	-	-	-	-		
4	Maintenance Of Electric Plant	3,694	11	3,705	3,371		
5	Maintenance Of Miscellaneous Hydraulic Plant	11,483	-	11,483	11,483		
6	Operation Supervision And Engineering	1,686	-	1,686	1,686		
-8	Generation Expenses	-	-	-	(4,800)		
9	Miscellaneous Other Power Generation Expenses	25,398	-	25,398	25,398		
1	Maintenance Supervision And Engineering	-	-	-	-		
2	Maintenance Of Structures	2,395	-	2,395	2,395		
3	Maintenance Of Generating And Electric Equipment	13,960	2	13,961	13,097		
4	Maintenance Of Miscellaneous Other Power Generation Plant	21,441	-	21,441	19,852		
6	System Control And Load Dispatching	45	1,288,620	1,288,665	(83,825)		
0	Operation Supervision And Engineering	(20,282)	908,171	887,889	33,219		
1.1	Load Dispatch-Reliability	-	275,985	275,985	(1,250,424)		
1.2	Load Dispatch-Monitor And Operate Transmission System	-	1,056,581	1,056,581	920,214		
1.3	Load Dispatch-Transmission Service And Scheduling	-	364,301	364,301	287,420		
1.5	Reliability, Planning And Standards Development	-	461,839	461,839	6,871		
1.6	Transmission Service Studies	1,102	2,751	3,853	(6,105)		
2	Station Expenses	45,078	2,210	47,288	19,981		
3	Overhead Line Expenses	24,069	5	24,073	21,238		
6	Miscellaneous Transmission Expenses	50,169	1,344,716	1,394,886	126,255		
7	Rents	-	3,571	3,571	71		
9	Maintenance Of Structures	-	-	-	-		
0	Maintenance Of Station Equipment	47,854	137,865	185,719	28,310		
1	Maintenance Of Overhead Lines	89,395	10	89,405	50,306		
569 570 571	Maintenance Of Station Equipment			47,854 137,865	47,854 137,865 185,719	47,854 137,865 185,719 28,310	
	Maintenance Of Miscellaneous Transmission Plant	90,904	148,723	239,627	148,227		
80	Operation Supervision And Engineering	175,633	745,418	921,051	(150,657)		
581	Load Dispatching	561,425	184,082	745,507	(34,302)		

	E SERVICE COMPANY (LKS)		2015		Variance 2015 to 2014		
			Indirect				
FERC		Direct	Allocations of		Variance		
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation	
582	Station Expenses	22,310	51	22,361	(459)	_	
583	Overhead Line Expenses	813,343	13,929	827,272	(1,933,899)		
584	Underground Line Expenses	-	-	-	-		
585	Street Lighting And Signal System Expenses	-	-	-	-		
586	Meter Expenses	145,020	565,001	710,021	94,884		
87	Customer Installations Expenses		-	-	-		
88	Miscellaneous Distribution Expenses	1,003,272	1,063,811	2,067,083	519,628		
89	Rents	2,204	-	2,204	454		
590	Maintenance Supervision And Engineering	85	6,735	6,820	(6,665)		
591	Maintenance Of Structures	-	-	-	-		
92	Maintenance Of Station Equipment	24,684	7	24,691	13,195		
93	Maintenance Of Overhead Lines	17,291	105,238	122,530	(313,846)		
94	Maintenance Of Underground Lines	-	-	-	(3,396)		
95	Maintenance Of Line Transformers	60	-	60	(45)		
96	Maintenance Of Street Lighting And Signal Systems	-	-	-	-		
597	Maintenance Of Meters	-	-	-	-		
98	Maintenance Of Miscellaneous Distribution Plant	605,021	485	605,505	176,468		
307	Purchased Gas Expenses	10,330	-	10,330	(70,678)		
807 814	Operation Supervision And Engineering	113,234	-	113,234	112,809		
16	Wells Expenses	115,254	_	115,254	(139)		
17	Lines Expenses	4,466	28	4,494	(1,911)		
18	Compressor Station Expenses	52,501	13	52,514	(15,826)		
21	Purification Expenses	17,598	-	17,598	(974)		
325	Storage Well Royalties	-	-	-	-		
30	Maintenance Supervision And Engineering	-	-	-	-		
32	Maintenance Of Reservoirs And Wells	-	-	-	-		
33	Maintenance Of Lines	613	-	613	(1,384)		
34	Maintenance Of Compressor Station Equipment	-	-	-	-		
35	Maintenance Of Measuring And Regulating Station Equipment	-	-	-	-		
336	Maintenance Of Purification Equipment	-	-	-	-		
837	Maintenance Of Other Equipment	48,574	-	48,574	43,654		
850	Operation Supervision And Engineering	433,873	31,764	465,637	152,428		

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			2015			Variance 2015 to 2014
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
51	System Control And Load Dispatching	3,264	31	3,296	3,194	
56	Mains Expenses	60	-	60	(1,878)	
60	Rents	265	-	265	(785)	
63	Maintenance Of Mains	59	-	59	(9,670)	
71	Distribution Load Dispatching	-	-	-	-	
74	Mains And Services Expenses	11,144	565	11,709	(1,689)	
75	Measuring And Regulating Station Expenses-General	1,162	-	1,162	938	
6	Measuring And Regulating Station Expenses-Industrial	-	-	-	-	
77	Measuring And Regulating Station Expenses-City Gate Check Stations	360	-	360	234	
78	Meter And House Regulator Expenses	472	-	472	241	
79	Customer Installations Expenses	-	-	-	-	
30	Other Expenses	537,676	136,589	674,266	227,124	
31	Rents	930	-	930	230	
36	Maintenance Of Structures And Improvements	-	-	-	-	
37	Maintenance Of Mains	19,262	85	19,346	(173,051)	
39	Maintenance Of Measuring And Regulating Station Equipment-General	-	-	-	-	
0	Maintenance Of Measuring And Regulating Station Equipment-Industrial	-	-	-	-	
)1	Maintenance Of Measuring And Regulating Station Equipment-City Gate Check Stations	-	-	-	-	
2	Maintenance Of Services	219,319	-	219,319	71,346	
03	Maintenance Of Meters And House Regulators	-	-	-	-	
94	Maintenance Of Other Equipment	26,151	-	26,151	26,151	
1	Supervision	181,008	2,048,129	2,229,137	260,334	
)2	Meter Reading Expenses	12,471	218,263	230,733	6,677	
)3	Customer Records And Collection Expenses	3,463,899	6,533,963	9,997,862	281,917	
)4	Uncollectible Accounts	-	-	-		
)5	Miscellaneous Customer Accounts Expenses	_	2,465	2,465	(7,338)	
)7	Supervision	1,998	243,356	245,354	(31,042)	
)8	Customer Assistance Expenses	11,545,057	377,126	11,922,183	540,637	
		11,515,657	577,120	11,722,100	510,057	
19	Informational And Instructional Advertising Expenses	740,684	63,373	804,057	345,829	
0	Miscellaneous Customer Service And Informational Expenses	142,710	388,745	531,455	(24,394)	
2	Demonstrating And Selling Expenses	-	-	-	-	
3	Advertising Expenses	752,148	3,211	755,359	692,739	
20	Administrative And General Salaries	2,033,400	30,358,703	32,392,103	1,979,114	Primarily due to annual wage increases, increased IT and Customer Services headcount, ar charges previously made to other accounts (offset above).

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			2015			Variance 2015 to 2014
FERC		Direct	Indirect Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
21	Office Supplies And Expenses	676,380	5,891,349	6,567,729	(870,110)	<u> </u>
23	Outside Services Employed	4,122,593	15,174,144	19,296,737	656,441	
		.,,	10,17,11	17,270,707		
24	Property Insurance	-	231,066	231,066	39,317	
25	Injuries And Damages	31,442	165,778	197,220	(999,404)	
				, -	(, . ,	
26	Employee Pensions And Benefits	14,990,209	2,558,487	17,548,695	4,567,818	Primarily due to an increase in employee pensions (due to change
						mortality table and reduced expect return on assets) and medical
28	Regulatory Commission Expenses	_	-	-	(57,926)	expenses.
30.1	General Advertising Expenses	211,522	4,288	215,810	(865,375)	
30.2	Miscellaneous General Expenses	259,429	1,922,514	2,181,942		Primarily due to an increase in research and development expense

			2015			ariance 2015 to 2014
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
931	Rents	8,933	1,318,763	1,327,696	121,732	
035	Maintenance Of General Plant	23,151	628,654	651,805	(172,907)	
Grand Tot		512,763,920	119,127,824	631,891,745	(24,221,518)	

			2016			Variance 2016 to 2015
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
107	Construction Work In Progress	13,368,644	25,384,155	38,752,799	5,946,334	Increases due primarily to IT projects (Customer Care System upgrade, license agreements for storage and data backup systems, mobile radio dispatch system replacement) offset by lower environmental compliance spending.
108	Accumulated Provision For Depreciation Of Utility Plant	767,553	712,841	1,480,394	761,962	
131	Cash	(877,195)	-	(877,195)	(619,726)	
143	Other Accounts Receivable	8,967	-	8,967	(988)	
146	Accounts Receivable From Associated Companies	-	-	-	-	
151	Fuel Stock	337,608,573	-	337,608,573	(78,572,194)	
163	Stores Expense Undistributed	453,694	686,955	1,140,649	341,005	
165	Prepayments	7,061,794	16,498,693	23,560,487	13,704,350	Primarily due to prepaid contracts for information technology. Prior to June 2016 the IT prepaid balance was held on LKS. Starting in June 2016 the prepayments made by LKS on behalf of LG&E were moved to LG&E.
182.3	Other Regulatory Assets	2,158,449	-	2,158,449	533,329	
183	Preliminary Survey And Investigation Charges	748,260	1,176	749,436	549,478	
184	Clearing Accounts	21,623,637	4,001,341	25,624,978	781,397	
186	Miscellaneous Deferred Debits	465,893	-	465,893	202,450	
188	Research, Development And Demonstration Expenses	54,215	391,534	445,749	419,314	
228.3	Accumulated Provision For Pensions And Benefits	5,585,775	-	5,585,775	981,047	

			2016			Variance 2016 to 2015
FERC		Direct	Indirect Allocations of		Variance	
Account 232	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
232	Accounts Payable	10,704,017	1,103,816	11,807,833	10,574,105	Primarily due to 401K payable. LKS began remitting the 401K company match and payroll deductions on behalf of LG&E in 2016. Previously this was paid by LG&E.
234	Accounts Payable To Associated Companies	_	-	-	-	
236	Taxes Accrued	(1,804,368)	-	(1,804,368)	(823,915))
41	Tax Collections Payable	-	-	-	-	
242	Miscellaneous Current And Accrued Liabilities	1,318,583	-	1,318,583	323,608	
253	Other Deferred Credits	-	-	-	(1,370,426)	
-00	Operating Revenues	-	-	-	-	
08.1	Taxes Other Than Income Taxes, Utility Operating Income	1,734,426	3,233,166	4,967,592	943,942	
08.2	Taxes Other Than Income Taxes, Other Income And Deductions	-	-	-	(307)	
16	Cost And Expenses Of Merchandising, Jobbing And Contract Work	31	-	31	31	
-18	Nonoperating Rental Income	-	-	-		
19	Interest And Dividend Income	-	- (17.070)	-	5	
21 21.1	Miscellaneous Nonoperating Income	3,882	(17,970)	(14,088)	(14,088)	
26.1	Gain On Disposition Of Property Donations	1,477,528	27,893		- (1,685,819)	
26.3	Penalties	5,499	26,348	1,505,421 31,847	26,681	
26.4	Expenditures For Certain Civic, Political And Related Activities	73,523	494,020	567,543	62,707	
26.5	Other Deductions	730,320	394,617	1,124,937	(121,422)	
31	Other Interest Expense	1,009	-	1,009	1,009	
54	Rent From Electric Property	-	-	-	-	
56	Other Electric Revenues	149	-	149	21	
93	Rent From Gas Property	-	-	-	-	
500	Operation Supervision And Engineering	445,279	5,398,350	5,843,629	2,150,490	Primarily due to an allocation of Trimble County 2 and Cane Run 7 costs from KU to LG&E that was recorded through LKS.
501	Fuel	196,342	1,808,916	2,005,258	668,118	č
502	Steam Expenses	133,159	27,441	160,599	21,364	
05	Electric Expenses	3,588	32	3,620	3,620	
606	Miscellaneous Steam Power Expenses	1,157,441	433,539	1,590,980	533,246	
510	Maintenance Supervision And Engineering	288,138	606,101	894,239	566,247	
511	Maintenance Of Structures	127,518	_	127,518	(20,573)	

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			2016		Varia	nce 2016 to 2015
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
12	Maintenance Of Boiler Plant	52,868	1,583	54,451	(128,818)	
13	Maintenance Of Electric Plant	302,809	41,092	343,901	140,714	
14	Maintenance Of Miscellaneous Steam Plant	52,642	-	52,642	(18,492)	
35	Operation Supervision And Engineering	-	-	-	-	
38	Electric Expenses	-	-	-	-	
39	Miscellaneous Hydraulic Power Generation Expenses	1,445	-	1,445	56	
41	Maintenance Supervision And Engineering	-	-	-	-	
12	Maintenance Of Structures	836	-	836	(2,380)	
43	Maintenance Of Reservoirs, Dams And Waterways	-	-	-	-	
4	Maintenance Of Electric Plant	10,159	-	10,159	6,454	
-5	Maintenance Of Miscellaneous Hydraulic Plant	4,083	-	4,083	(7,400)	
6	Operation Supervision And Engineering	3,469	-	3,469	1,783	
18	Generation Expenses	1,845	-	1,845	1,845	
9	Miscellaneous Other Power Generation Expenses	33,800	47	33,846	8,449	
1	Maintenance Supervision And Engineering	-	-	-	-	
52	Maintenance Of Structures	6,684	-	6,684	4,290	
53	Maintenance Of Generating And Electric Equipment	16,991	164	17,155	3,194	
4	Maintenance Of Miscellaneous Other Power Generation Plant	30,319	169	30,488	9,047	
6	System Control And Load Dispatching	4,510	1,180,977	1,185,487	(103,178)	
0	Operation Supervision And Engineering	20,151	811,451	831,601	(56,288)	
1.1	Load Dispatch-Reliability	16,667	222,445	239,112	(36,873)	
1.2	Load Dispatch-Monitor And Operate Transmission System	255,958	843,057	1,099,015	42,434	
1.3	Load Dispatch-Transmission Service And Scheduling	-	404,827	404,827	40,527	
1.5	Reliability, Planning And Standards Development	4,409	418,755	423,164	(38,675)	
1.6	Transmission Service Studies	22,587	-	22,587	18,734	
2	Station Expenses	30,477	21,022	51,499	4,211	
3	Overhead Line Expenses	9,909	10,722	20,632	(3,442)	
6	Miscellaneous Transmission Expenses	564,940	963,812	1,528,752	133,866	
7	Rents	2,180	324	2,504	(1,067)	
9	Maintenance Of Structures	-	-	-	-	
0	Maintenance Of Station Equipment	55,880	179,467	235,348	49,629	
1	Maintenance Of Overhead Lines	49,154	51,904	101,058	11,653	
571	Maintenance Of Overhead Lines	49,154	51,904	101,058	11,653	
73	Maintenance Of Miscellaneous Transmission Plant	53,218	145,375	198,593	(41,033)	
30	Operation Supervision And Engineering	107,133	956,793	1,063,926	142,875	
81	Load Dispatching	548,397	151,812	700,209	(45,297)	

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			2016		Variance 2016 to 2015		
			Indirect				
FERC		Direct	Allocations of		Variance		
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation	
582	Station Expenses	24,709	5	24,714	2,352		
583	Overhead Line Expenses	838,392	12,508	850,899	23,627		
84	Underground Line Expenses	-	-	-	-		
85	Street Lighting And Signal System Expenses	-	-	-	-		
86	Meter Expenses	182,339	590,590	772,929	62,908		
87	Customer Installations Expenses	_	-	_	-		
88	Miscellaneous Distribution Expenses	485,411	1,730,235	2,215,646	148,563		
89	Rents	3,062	-	3,062	858		
90	Maintenance Supervision And Engineering	-	1,560	1,560	(5,260)		
91	Maintenance Of Structures	56	-	56	56		
92	Maintenance Of Station Equipment	26,626	1	26,627	1,936		
93	Maintenance Of Overhead Lines	3,525	107,627	111,152	(11,378)		
94	Maintenance Of Underground Lines	-	-	-	-		
95	Maintenance Of Line Transformers	1,654	-	1,654	1,594		
96	Maintenance Of Street Lighting And Signal Systems	-	-	-	-		
97	Maintenance Of Meters	-	-	-	-		
98	Maintenance Of Miscellaneous Distribution Plant	144,295	492,453	636,748	31,243		
)7	Purchased Gas Expenses	3,926	-	3,926	(6,404)		
14	Operation Supervision And Engineering	126,679	-	126,679	13,446		
16	Wells Expenses	-	-	-	(15)		
17	Lines Expenses	-	-	-	(4,494)		
18	Compressor Station Expenses	22,840	-	22,840	(29,674)		
21	Purification Expenses	12	-	12	(17,586)		
25	Storage Well Royalties	3,606	-	3,606	3,606		
30	Maintenance Supervision And Engineering	-	-	-	-		
32	Maintenance Of Reservoirs And Wells	-	-	-	-		
33	Maintenance Of Lines	-	-	-	(613)		
34	Maintenance Of Compressor Station Equipment	3,414	-	3,414	3,414		
35	Maintenance Of Measuring And Regulating Station Equipment	-	-	-	-		
36	Maintenance Of Purification Equipment	-	-	-	-		
37	Maintenance Of Other Equipment	50,871	-	50,871	2,297		
350	Operation Supervision And Engineering	621,188	26,194	647,382	181,745		

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FERC		Direct	Indirect Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
851	System Control And Load Dispatching	110	-	110	(3,186)	
856	Mains Expenses	-	-	-	(60)	
860	Rents	250	-	250	(15)	
863	Maintenance Of Mains	1,641	-	1,641	1,581	
871	Distribution Load Dispatching	334	-	334	334	
874	Mains And Services Expenses	21,834	-	21,834	10,124	
875	Measuring And Regulating Station Expenses-General	753	-	753	(408)	
876	Measuring And Regulating Station Expenses-Industrial	-	-	-	-	
877	Measuring And Regulating Station Expenses-City Gate Check Stations	1,654	-	1,654	1,294	
878	Meter And House Regulator Expenses	7,275	120	7,395	6,923	
879	Customer Installations Expenses	-	-	-	-	
880	Other Expenses	567,647	536,550	1,104,198	429,932	
881	Rents	215	-	215	(715)	
886	Maintenance Of Structures And Improvements	-	-	-	-	
887	Maintenance Of Mains	5,029	15	5,044	(14,303)	
889	Maintenance Of Measuring And Regulating Station Equipment-General	-	-	-	-	
890	Maintenance Of Measuring And Regulating Station Equipment-Industrial	-	-	-	-	
891	Maintenance Of Measuring And Regulating Station Equipment-City Gate Check Stations	-	-	-	-	
892	Maintenance Of Services	-	206,936	206,936	(12,383)	
893	Maintenance Of Meters And House Regulators	-	-	-	-	
894	Maintenance Of Other Equipment	231,538	105,826	337,364	311,213	
901	Supervision	173,724	1,817,555	1,991,278	(237,859)	
902	Meter Reading Expenses	685	223,175	223,859	(6,874)	
903	Customer Records And Collection Expenses	3,819,292	6,905,692	10,724,984	727,122	
904	Uncollectible Accounts	-	-	-	-	
905	Miscellaneous Customer Accounts Expenses	6,750	835	7,585	5,120	
907	Supervision	3,638	290,099	293,737	48,383	
908	Customer Assistance Expenses	15,221,239	237,377	15,458,615	3,536,433	The majority of the change is related to costs recovered through the DSM mechanism.
909	Informational And Instructional Advertising Expenses	485,200	23,780	508,979	(295,078)	
910	Miscellaneous Customer Service And Informational Expenses	219,681	605,496	825,176	293,721	
912	Demonstrating And Selling Expenses	-	-	-	-	
913	Advertising Expenses	1,294,230	20,077	1,314,306	558,947	
920	Administrative And General Salaries	1,681,747	30,401,092	32,082,838	(309,264)	

FROM TH	E SERVICE COMPANY (LKS)	I	2016		,	Variance 2016 to 2015
FERC Account	FERC Account Description	Direct Assignments	Indirect Allocations of Costs	Total	Variance Amount	Explanation
921	Office Supplies And Expenses	662,258	5,067,076	5,729,334	(838,395)	
923	Outside Services Employed	7,598,212	9,661,490	17,259,702	(2,037,035)	
924	Property Insurance	838	235,065	235,903	4,836	
925	Injuries And Damages	2,258,824	131,412	2,390,236	2,193,016	Primarily due to a convenience payment for a legal settlement.
926	Employee Pensions And Benefits	4,303,831	12,845,082	17,148,913	(399,783)	
928 930.1 930.2	Regulatory Commission Expenses General Advertising Expenses Miscellaneous General Expenses	41,210 41,406 (360,904)	34 2,411,083	41,210 41,439 2,050,180	41,210 (174,370) (131,763)	

			2016			ariance 2016 to 2015
FERC		Direct	Indirect Allocations of		Variance	
Account	FERC Account Description	Assignments		Total	Amount	Explanation
931	Rents	180,327	1,077,729	1,258,056	(69,640)	
935	Maintenance Of General Plant	12,780	576,449	589,230	(62,576)	
Grand To	otal	448,913,692	143,959,976	592,873,668	(39,018,077)	

	E SERVICE COMPANY (LKS)	1	Base Year ¹		Variance Base Year to 2016		
			Indirect		, ur lance	2000 I cui to 2010	
ERC		Direct	Allocations of		Variance		
ccount	FERC Account Description	Assignments	Costs	Total	Amount	Explanation	
)7	Construction Work In Progress	4,875,191	33,097,779	37,972,970	(779,829)	•	
8	Accumulated Provision For Depreciation Of Utility Plant	310,955	439,116	750,071	(730,323)		
1	Cash	-	-	-	877,195		
3	Other Accounts Receivable	-	-	-	(8,967)		
-6	Accounts Receivable From Associated Companies	-	-	-	-		
1	Fuel Stock	-	-	-	(337,608,573)		
2		200 (02	024.055	1 1 2 2 6 6 0	(6.000)		
3 5	Stores Expense Undistributed	208,683	924,977	1,133,660	(6,989)		
5	Prepayments	(294,311)	13,445,825	13,151,514	(10,408,973)		
2.3	Other Regulatory Assets	-	1,062,808	1,062,808	(1,095,640)		
3	Preliminary Survey And Investigation Charges	61,542	538	62,081	(687,356)		
5 4	Clearing Accounts	1,690,040	5,596,354	7,286,394	(18,338,584)		
r	Couring / Woodins	1,070,040	5,570,554	7,200,394	(10,330,307)		
5	Miscellaneous Deferred Debits	65,555	-	65,555	(400,337)		
3	Research, Development And Demonstration Expenses	13,599	156,805	170,404	(275,345)		
8.3	Accumulated Provision For Pensions And Benefits	-	-	-	(5,585,775)		

			Base Year ¹		Va	riance Base Year to 2016
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
232	Accounts Payable	18	-	18	(11,807,815)	
234 236	Accounts Payable To Associated Companies Taxes Accrued	(267,692)	-	(267,692)	-	Actual dollars presented for calendar
230		(201,072)		(207,092)	1,550,070	year 2014 through 2016 include convenience payments. ¹
241	Tax Collections Payable	-	-	-	-	
242	Miscellaneous Current And Accrued Liabilities	-	-	-	(1,318,583)	
253	Other Deferred Credits	-	-	-	-	
400	Operating Revenues	-	-	-	-	
408.1	Taxes Other Than Income Taxes, Utility Operating Income Taxes Other Than Income Taxes, Other Income And Deductions	532,166	4,205,929	4,738,094	(229,498)	
408.2 416		- 31	-	- 31	-	
418	Cost And Expenses Of Merchandising, Jobbing And Contract Work Nonoperating Rental Income	51	-	-	-	
419	Interest And Dividend Income	-	-	-	-	
421	Miscellaneous Nonoperating Income	3,882	(12,414)	(8,532)	5,556	
421.1	Gain On Disposition Of Property	-	(12,414)	-	-	
426.1	Donations	1,085,473	921,773	2,007,246	501,825	
426.3	Penalties	5,499	26,348	31,847	-	
426.4	Expenditures For Certain Civic, Political And Related Activities	34,168	461,773	495,942	(71,602)	
426.5	Other Deductions	361,851	508,909	870,759	(254,178)	
431	Other Interest Expense	-	-	-	(1,009)	
454	Rent From Electric Property	-	-	-	-	
456	Other Electric Revenues	-	-	-	(149)	
493	Rent From Gas Property	-	-	-	-	
500	Operation Supervision And Engineering	240,074	6,135,707	6,375,782	532,153	
501	Fuel	196,342	1,686,319	1,882,662	(122,597)	
502	Steam Expenses	61,417	68,784	130,201	(30,398)	
505	Electric Expenses	10,975	8,766	19,741	16,121	
506	Miscellaneous Steam Power Expenses	577,725	1,764,025	2,341,750	750,770	
510	Maintenance Supervision And Engineering	382,102	1,286,106	1,668,208	773,969	
511	Maintenance Of Structures	124,383	24,987	149,370	21,853	

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			1	1		
			Base Year ¹		Vai	riance Base Year to 2016
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
512	Maintenance Of Boiler Plant	34,788	1,581	36,369	(18,082)	
513	Maintenance Of Electric Plant	176,242	67,317	243,558	(100,342)	
514	Maintenance Of Miscellaneous Steam Plant	21,694	36,558	58,252	5,610	
535	Operation Supervision And Engineering	-	-	-	-	
538	Electric Expenses	-	-	-	-	
539	Miscellaneous Hydraulic Power Generation Expenses	862	-	862	(583)	
541	Maintenance Supervision And Engineering	-	-	-	-	
542	Maintenance Of Structures	-	-	-	(836)	
543	Maintenance Of Reservoirs, Dams And Waterways	-	-	-	-	
544	Maintenance Of Electric Plant	-	-	-	(10,159)	
545	Maintenance Of Miscellaneous Hydraulic Plant	2,168	4,916	7,084	3,000	
546	Operation Supervision And Engineering	3,455	-	3,455	(14)	
548	Generation Expenses	1,845	-	1,845	-	
549	Miscellaneous Other Power Generation Expenses	22,035	17	22,052	(11,794)	
551	Maintenance Supervision And Engineering	-	-	-	-	
552	Maintenance Of Structures	5,912	-	5,912	(773)	
553	Maintenance Of Generating And Electric Equipment	3,773	73	3,846	(13,309)	
554	Maintenance Of Miscellaneous Other Power Generation Plant	24,647	16,108	40,755	10,267	
556	System Control And Load Dispatching	2,796	1,167,064	1,169,860	(15,627)	
560	Operation Supervision And Engineering	20,151	844,332	864,483	32,882	
561.1	Load Dispatch-Reliability	16,667	308,127	324,795	85,682	
561.2	Load Dispatch-Monitor And Operate Transmission System	255,958	686,518	942,477	(156,538)	
561.3	Load Dispatch-Transmission Service And Scheduling	-	407,050	407,050	2,223	
561.5	Reliability, Planning And Standards Development	4,409	421,103	425,512	2,348	
561.6	Transmission Service Studies	22,587	-	22,587	-	
562	Station Expenses	30,477	87,624	118,101	66,602	
563	Overhead Line Expenses	9,909	82,510	92,419	71,788	
566	Miscellaneous Transmission Expenses	564,940	949,389	1,514,328	(14,423)	
567	Rents	2,180	41,776	43,956	41,452	
569	Maintenance Of Structures	-	-	-	-	
570	Maintenance Of Station Equipment	55,880	440,808	496,688	261,340	
571	Maintenance Of Overhead Lines	49,154	1,195,466	1,244,620	1,143,562	Vegetation management charges are
						budgeted to be paid by LKS, but
						most of the actual changes are
						directly paid by LG&E.
573	Maintenance Of Miscellaneous Transmission Plant	53,218	159,163	212,382	13,788	
580	Operation Supervision And Engineering	68,832	1,044,461	1,113,293	49,366	
581	Load Dispatching	264,378	477,681	742,059	41,849	

			Base Year ¹		Variance	Base Year to 2016
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
582	Station Expenses	15,089	3	15,092	(9,622)	
83	Overhead Line Expenses	414,535	534,672	949,207	98,308	
84	Underground Line Expenses	-	-	-	-	
585	Street Lighting And Signal System Expenses	-	-	-	-	
86	Meter Expenses	90,420	680,161	770,581	(2,347)	
87	Customer Installations Expenses	-	(8,800)	(8,800)	(8,800)	
88	Miscellaneous Distribution Expenses	210,081	1,643,384	1,853,465	(362,181)	
89	Rents	1,015	3,408	4,423	1,361	
90	Maintenance Supervision And Engineering	-	701	701	(859)	
91	Maintenance Of Structures	56	-	56	-	
92	Maintenance Of Station Equipment	13,494	-	13,494	(13,133)	
93	Maintenance Of Overhead Lines	3,525	69,250	72,775	(38,377)	
94	Maintenance Of Underground Lines	-	-	-	-	
95	Maintenance Of Line Transformers	1,654	-	1,654	-	
96	Maintenance Of Street Lighting And Signal Systems	-	-	-	-	
97	Maintenance Of Meters	-	-	-	-	
98	Maintenance Of Miscellaneous Distribution Plant	77,048	680,828	757,876	121,128	
07	Purchased Gas Expenses	2,465	-	2,465	(1,461)	
14	Operation Supervision And Engineering	206,863	-	206,863	80,183	
16	Wells Expenses	-	-	-	-	
17	Lines Expenses	-	-	-	-	
18	Compressor Station Expenses	7,253	-	7,253	(15,587)	
21	Purification Expenses	12	-	12	-	
25	Storage Well Royalties	3,606	47,873	51,479	47,873	
30	Maintenance Supervision And Engineering	-	-	-	-	
32	Maintenance Of Reservoirs And Wells	-	-	-	-	
3	Maintenance Of Lines	-	-	-	-	
34	Maintenance Of Compressor Station Equipment	3,414	-	3,414	-	
35	Maintenance Of Measuring And Regulating Station Equipment	-	-	-	-	
36	Maintenance Of Purification Equipment	-	-	-	-	
37	Maintenance Of Other Equipment	28,763	17,824	46,587	(4,284)	
850	Operation Supervision And Engineering	781,395	31,720	813,116	165,734	

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			Base Year ¹		Vai	riance Base Year to 2016
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
851	System Control And Load Dispatching	12	-	12	(98)	
856	Mains Expenses	51,627	-	51,627	51,627	
860	Rents	150	(4,879)	(4,729)	(4,979)	
363	Maintenance Of Mains	1,588	-	1,588	(52)	
871	Distribution Load Dispatching	-	-	-	(334)	
874	Mains And Services Expenses	8,549	-	8,549	(13,285)	
875	Measuring And Regulating Station Expenses-General	542	-	542	(211)	
376	Measuring And Regulating Station Expenses-Industrial	-	-	-	-	
877	Measuring And Regulating Station Expenses-City Gate Check Stations	226	-	226	(1,428)	
878	Meter And House Regulator Expenses	5,783	120	5,903	(1,492)	
879	Customer Installations Expenses	-	-	-	-	
880	Other Expenses	467,066	572,993	1,040,059	(64,139)	
881	Rents	200	-	200	(15)	
386	Maintenance Of Structures And Improvements	-	-	-	-	
387	Maintenance Of Mains	1,426	15	1,441	(3,603)	
389	Maintenance Of Measuring And Regulating Station Equipment-General	-	-	-	-	
390	Maintenance Of Measuring And Regulating Station Equipment-Industrial	-	-	-	-	
391	Maintenance Of Measuring And Regulating Station Equipment-City Gate Check Stations	-	-	-	-	
392	Maintenance Of Services	-	278,229	278,229	71,293	
393	Maintenance Of Meters And House Regulators	-	-	-	-	
394	Maintenance Of Other Equipment	218,227	88,715	306,942	(30,422)	
901	Supervision	82,844	1,788,752	1,871,596	(119,682)	
902	Meter Reading Expenses	474	219,424	219,897	(3,962)	
903	Customer Records And Collection Expenses	1,917,019	8,752,313	10,669,332	(55,652)	
904	Uncollectible Accounts	-	174,495	174,495	174,495	
905	Miscellaneous Customer Accounts Expenses	-	(21,276)	(21,276)	(28,862)	
907	Supervision	1,814	283,391	285,205	(8,532)	
908	Customer Assistance Expenses	16,842,770	251,357	17,094,127	1,635,512	The majority of the change is related to costs recovered through the DSM
						mechanism.
09	Informational And Instructional Advertising Expenses	221,115	207,569	428,684	(80,295)	
910	Miscellaneous Customer Service And Informational Expenses	107,891	721,928	829,819	4,642	
912	Demonstrating And Selling Expenses	-	-	-	-	
913	Advertising Expenses	599,869	682,765	1,282,634	(31,672)	
	Administrative And General Salaries	947,817	30,356,608	31,304,425	(778,413)	

TROM III	E SERVICE COMPANY (LKS)		Base Year ¹		Varianc	e Base Year to 2016
FERC Account	FERC Account Description	Direct Assignments	Indirect Allocations of Costs	Total	Variance Amount	Explanation
921	Office Supplies And Expenses	541,038	6,040,010	6,581,049	851,715	Dipiniuton
923	Outside Services Employed	3,524,224	11,429,425	14,953,649	(2,306,053)	
924	Property Insurance	-	1,154,109	1,154,109	918,206	
925	Injuries And Damages	64,611	675,237	739,848	(1,650,387)	
926	Employee Pensions And Benefits	951,590	16,139,180	17,090,770	(58,142)	
928 930.1 930.2	Regulatory Commission Expenses General Advertising Expenses Miscellaneous General Expenses	30,206 65,339 (750,294)	212,526 37,516 3,397,020	242,732 102,855 2,646,726	201,522 61,415 596,546	

			Base Year ¹			ce Base Year to 2016
			Indirect			
ERC		Direct	Allocations of		Variance	
ccount	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
31	Rents	89,892	1,219,137	1,309,029	50,973	
35	Maintenance Of General Plant	(3,106)	,	336,356	(252,874)	
rand Total	1	39,849,819	168,948,022	208,797,841	(384,075,827)	

¹Actual dollars presented for calendar year 2012 through 2016 include convenience payments. A convenience payment occurs when one affiliate, as a matter of convenience for the vendor, makes a payment on behalf of other affiliates and is subsequently reimbursed by those affiliates. Convenience payments (including, but not limited to, fuel purchases, reagent purchases, medical claims and pension funding) are excluded from the base period and the forecasted test period.

			Test Year ¹		Varia	ance Test Year to Base Year
FEDG		D' (Indirect		X 7 •	
FERC Account	FERC Account Description	Direct Assignments	Allocations of Costs	Total	Variance Amount	Explanation
107	Construction Work In Progress	-	94,365,500	94,365,500		Primarily due to implementation of an Advanced Metering System,
108 131 143 146 151	Accumulated Provision For Depreciation Of Utility Plant Cash Other Accounts Receivable Accounts Receivable From Associated Companies Fuel Stock		66,976 - - - -	66,976 - - -	(683,095) - - - -	
163 165	Stores Expense Undistributed Prepayments	-	1,917,222	1,917,222	783,562 (13,151,514)	
182.3	Other Regulatory Assets	-	646,683	646,683	(416,125)	
183 184	Preliminary Survey And Investigation Charges Clearing Accounts	- 272,880	- 7,849,860	- 8,122,740	(62,081) 836,346	
186 188 228.3	Miscellaneous Deferred Debits Research, Development And Demonstration Expenses Accumulated Provision For Pensions And Benefits	-	- - -	- -	(65,555) (170,404)	

			Test Year ¹		Variance T	est Year to Base Year
FERC		Direct	Indirect Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
32	Accounts Payable	-	-	-	(18)	
34	Accounts Payable To Associated Companies	-	-	-	-	
36	Taxes Accrued	-	-	-	267,692	
41	Tax Collections Payable	-	-	-	-	
42	Miscellaneous Current And Accrued Liabilities	-	-	-	-	
53	Other Deferred Credits	-	-	-	-	
00	Operating Revenues	-	-	-	-	
08.1	Taxes Other Than Income Taxes, Utility Operating Income	200,562	4,400,520	4,601,082	(137,012)	
08.2	Taxes Other Than Income Taxes, Other Income And Deductions	-	-	-	-	
16	Cost And Expenses Of Merchandising, Jobbing And Contract Work	-	-	-	(31)	
18	Nonoperating Rental Income	-	-	-	-	
19	Interest And Dividend Income	-	-	-	-	
21	Miscellaneous Nonoperating Income	-	-	-	8,532	
21.1	Gain On Disposition Of Property	-	-	-	-	
26.1	Donations	20,300	2,098,013	2,118,313	111,068	
26.3	Penalties	-	-	-	(31,847)	
26.4	Expenditures For Certain Civic, Political And Related Activities	9,500 26,180	403,667	413,167	(82,774)	
26.5	Other Deductions	26,180	808,507	834,687	(36,072)	
31 54	Other Interest Expense Rent From Electric Property	-	-	-	-	
54 56	Other Electric Revenues		-	-	-	
93	Rent From Gas Property		-	-	-	
95 00	Operation Supervision And Engineering	_	- 5,698,596	5,698,596	(677,186)	
50	Operation Supervision And Engineering	-	5,098,590	3,098,390	(077,180)	
01	Fuel	-	1,343,434	1,343,434	(539,228)	
02	Steam Expenses	-	94,475	94,475	(35,726)	
05	Electric Expenses	-	29,789	29,789	10,048	
06	Miscellaneous Steam Power Expenses	-	2,996,367	2,996,367	654,617	
510	Maintenance Supervision And Engineering	-	2,212,274	2,212,274	544,065	
511	Maintenance Of Structures	50,320	5,748	56,068	(93,302)	

Attachment to Response to KIUC-1 Question No. 37 44 of 49 Scott

TROWTIN	E SERVICE COMPANY (LKS)			1					
			Test Year ¹		Variance Test Year to Base Year				
			Indirect						
FERC		Direct	Allocations of		Variance				
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation			
512	Maintenance Of Boiler Plant	-	-	-	(36,369)				
513	Maintenance Of Electric Plant	-	-	-	(243,558)				
514	Maintenance Of Miscellaneous Steam Plant	-	38,549	38,549	(19,703)				
535	Operation Supervision And Engineering	-	-	-	-				
538	Electric Expenses	-	-	-	-				
539	Miscellaneous Hydraulic Power Generation Expenses	-	-	-	(862)				
541	Maintenance Supervision And Engineering	-	-	-	-				
542	Maintenance Of Structures	-	-	-	-				
543	Maintenance Of Reservoirs, Dams And Waterways	-	-	-	-				
544	Maintenance Of Electric Plant	-	-	-	-				
545	Maintenance Of Miscellaneous Hydraulic Plant	-	7,804	7,804	720				
546	Operation Supervision And Engineering	-	-	-	(3,455)				
548	Generation Expenses	-	-	-	(1,845)				
549	Miscellaneous Other Power Generation Expenses	-	-	-	(22,052)				
551	Maintenance Supervision And Engineering	-	-	-	-				
552	Maintenance Of Structures	-	-	-	(5,912)				
553	Maintenance Of Generating And Electric Equipment	-	-	-	(3,846)				
554	Maintenance Of Miscellaneous Other Power Generation Plant	-	61,579	61,579	20,824				
556	System Control And Load Dispatching	-	1,248,390	1,248,390	78,530				
560	Operation Supervision And Engineering	-	1,013,330	1,013,330	148,847				
561.1	Load Dispatch-Reliability	-	379,709	379,709	54,914				
561.2	Load Dispatch-Monitor And Operate Transmission System	-	998,210	998,210	55,734				
561.3	Load Dispatch-Transmission Service And Scheduling	-	437,255	437,255	30,205				
561.5	Reliability, Planning And Standards Development	_	393,409	393,409	(32,104)				
561.6	Transmission Service Studies	_	-	-	(22,587)				
562	Station Expenses	-	431,004	431,004	312,903				
563	Overhead Line Expenses	-	244,298	244,298	151,879				
566	Miscellaneous Transmission Expenses	_	1,564,887	1,564,887	50,558				
567	Rents	_	63,552	63,552	19,596				
569	Maintenance Of Structures	_	-						
570	Maintenance Of Station Equipment	_	983,516	983,516	486,828				
571	Maintenance Of Overhead Lines	_	3,335,886	3,335,886	2,091,265	Vegetation management charges are			
5/1			5,555,000	5,555,000	2,071,200	budgeted to be paid by LKS, but most of the actual charges in the Base year were directly paid by LG&E.			
573	Maintenance Of Miscellaneous Transmission Plant	-	228,062	228,062	15,680				
580	Operation Supervision And Engineering	-	1,242,521	1,242,521	129,228				
581	Load Dispatching	-	741,674	741,674	(385)				

			Test Year ¹		Variance Test Year to Base Year				
FERC		Direct	Indirect Allocations of		Variance				
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation			
582	Station Expenses	-	-	-	(15,092)				
583	Overhead Line Expenses	-	1,254,391	1,254,391	305,184				
84	Underground Line Expenses	-	-	-	-				
85	Street Lighting And Signal System Expenses	-	-	-	-				
86	Meter Expenses	-	2,051,992	2,051,992	1,281,411	The change is related to new / incremental operating expenses resulting from the Advanced Metering System (AMS) project			
87	Customer Installations Expenses	-	(79,200)	(79,200)	(70,400)	1			
88	Miscellaneous Distribution Expenses	-	2,386,071	2,386,071	532,607				
89	Rents	-	8,165	8,165	3,742				
90	Maintenance Supervision And Engineering	-	-	-	(701)	1			
91	Maintenance Of Structures	-	-	-	(56)	1			
92	Maintenance Of Station Equipment	-	-	-	(13,494)	1			
93	Maintenance Of Overhead Lines	-	113,712	113,712	40,937				
94	Maintenance Of Underground Lines	-	-	-	-				
95	Maintenance Of Line Transformers	-	-	-	(1,654)	1			
96	Maintenance Of Street Lighting And Signal Systems	-	-	-	-				
97	Maintenance Of Meters	-	1,427,900	1,427,900	1,427,900	The change is related to new / incremental operating expenses resulting from the Advanced Metering System (AMS) project			
98	Maintenance Of Miscellaneous Distribution Plant	-	570,164	570,164	(187,712)	1			
07	Purchased Gas Expenses	-	-	-	(2,465)	1			
14	Operation Supervision And Engineering	113,936	-	113,936	(92,926)	1			
16	Wells Expenses	-	-	-	-				
17	Lines Expenses	-	-	-	-				
18	Compressor Station Expenses	-	-	-	(7,253)	1			
21	Purification Expenses	-	-	-	(12)	1			
25	Storage Well Royalties	-	136,735	136,735	85,256				
30	Maintenance Supervision And Engineering	-	-	-	-				
32	Maintenance Of Reservoirs And Wells	-	-	-	-				
33	Maintenance Of Lines	-	-	-	-				
34	Maintenance Of Compressor Station Equipment	-	-	-	(3,414)	1			
35	Maintenance Of Measuring And Regulating Station Equipment	-	-	-	-				
36	Maintenance Of Purification Equipment	-	-	-	-				
337	Maintenance Of Other Equipment	-	51,885	51,885	5,298				
850	Operation Supervision And Engineering	700,952	49,553	750,505	(62,610))			

Attachment to Response to KIUC-1 Question No. 37 46 of 49 Scott

			Test Year ¹		Variance Test Year to Base Year			
FERC		Direct	Indirect Allocations of		Variance			
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation		
351	System Control And Load Dispatching	-	-	-	(12)			
356	Mains Expenses	143,500	-	143,500	91,873			
60	Rents	-	9,030	9,030	13,759			
63	Maintenance Of Mains	-	-	-	(1,588)			
71	Distribution Load Dispatching	-	-	-	-			
74	Mains And Services Expenses	-	-	-	(8,549)			
75	Measuring And Regulating Station Expenses-General	-	-	-	(542)			
76	Measuring And Regulating Station Expenses-Industrial	-	-	-	-			
377	Measuring And Regulating Station Expenses-City Gate Check Stations	-	-	-	(226)			
78	Meter And House Regulator Expenses	-	6,454	6,454	551			
79	Customer Installations Expenses	-	-	-	-			
80	Other Expenses	257,288	889,847	1,147,135	107,077			
81	Rents	-	6,755	6,755	6,555			
86	Maintenance Of Structures And Improvements	-	-	-	-			
87	Maintenance Of Mains	-	-	-	(1,441)			
89	Maintenance Of Measuring And Regulating Station Equipment-General	-	-	-	-			
90	Maintenance Of Measuring And Regulating Station Equipment-Industrial	-	-	-	-			
91	Maintenance Of Measuring And Regulating Station Equipment-City Gate Check Stations	-	-	-	-			
92	Maintenance Of Services	-	-	-	(278,229)			
93	Maintenance Of Meters And House Regulators	-	15,199	15,199	15,199			
94	Maintenance Of Other Equipment	-	361,010	361,010	54,068			
01	Supervision	-	2,136,013	2,136,013	264,416			
02	Meter Reading Expenses	-	287,714	287,714	67,817			
03	Customer Records And Collection Expenses	_	11,395,318	11,395,318	725,986			
04	Uncollectible Accounts	-	-	-	(174,495)			
05	Miscellaneous Customer Accounts Expenses	_	2,300	2,300	23,576			
07	Supervision	_	457,077	457,077	171,872			
08	Customer Assistance Expenses	20,374,723	371,567	20,746,289	3,652,162	The majority of the change is relate to costs recovered through the DSI		
						mechanism.		
09	Informational And Instructional Advertising Expenses	-	330,090	330,090	(98,594)			
10	Miscellaneous Customer Service And Informational Expenses	-	1,065,592	1,065,592	235,773			
12	Demonstrating And Selling Expenses	-	-	-	-			
13	Advertising Expenses	-	1,219,036	1,219,036	(63,598)			
20	Administrative And General Salaries	238,474	34,042,261	34,280,735	2,976,310	Primarily due to budgeted annual wage increases during the period from March 2016 through June 2018.		

			Test Year ¹	Variance Test Year to Base Year				
FERC		Direct	Indirect Allocations of		Variance			
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation		
21	Office Supplies And Expenses	11,292	7,052,181	7,063,473	482,425			
23	Outside Services Employed	20,399	12,271,418	12,291,817	(2,661,832)			
24	Property Insurance	-	4,977,412	4,977,412	3,823,303	Prepaid insurance amortization was budgeted as an affiliate charge for the test year, but only for two mon of the base year.		
25	Injuries And Damages	139,976	2,928,985	3,068,961	2,329,113	Prepaid insurance amortization was budgeted as an affiliate charge for the test year, but only for two mon of the base year.		
26	Employee Pensions And Benefits	828,672	18,589,343	19,418,015	2,327,245			
28 30.1	Regulatory Commission Expenses General Advertising Expenses	-	445,940 41,528	445,940 41,528	203,208 (61,327)			
30.2	Miscellaneous General Expenses	244,650	3,128,313	3,372,963	726,237			

			Test Year ¹		Variance	Test Year to Base Year
			Indirect			
FERC		Direct	Allocations of		Variance	
Account	FERC Account Description	Assignments	Costs	Total	Amount	Explanation
931	Rents	-	1,351,210	1,351,210	42,181	
35	Maintenance Of General Plant	-	87,136	87,136	(249,220)	
rand Tota	1	23,653,605	249,791,362	273,444,966	64,647,125	

¹Actual dollars presented for calendar year 2012 through 2016 include convenience payments. A convenience payment occurs when one affiliate, as a matter of convenience for the vendor, makes a payment on behalf of other affiliates and is subsequently reimbursed by those affiliates. Convenience payments (including, but not limited to, fuel purchases, reagent purchases, medical claims and pension funding) are excluded from the base period and the forecasted test period.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 38

Responding Witness: Adrien M. McKenzie

- Q.1-38. Please provide all work papers and supporting documentation used by Mr. McKenzie in the preparation of his Direct Testimony and Exhibits. Please provide all spreadsheets with cell formulas intact. Please include all exhibits in native spreadsheets with cell formulas intact.
- A.1-38. The work papers and support documentation requested are provided in AG 1-282. See the response to PSC 1-54 for the Excel spreadsheets pertaining to my Direct Testimony and Exhibits.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 39

- Q.1-39. Please provide all credit rating and bond rating agency reports (i.e., Standard and Poor's, Moody's, Fitch) for LG&E and KU for the last two years. Please include the most recent reports for 2017, if any.
- A.1-39. See response to AG 1-265 for LG&E rating agency reports. KU's reports can be found in the response to AG 1-266 in Case No. 2016-00370.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 40

Responding Witness: Adrien M. McKenzie

- Q.1-40. Please provide copies of all articles, regulatory commission orders, and reports cited by Mr. McKenzie in his Direct Testimony.
- A.1-40. See the response to AG 1-282 for the requested documents, with the exception of regulatory and court orders, which are publicly available from the respective agencies.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 41

- Q.1-41. Please provide all credit rating and bond rating agency reports (i.e., Standard and Poor's, Moody's, Fitch) for PPL Corporation for the last two years. Please include the most recent reports for 2017, if any.
- A.1-41. See the response to AG 1-266.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 42

- Q.1-42. Please provide all work papers and supporting documentation used by Mr. Arbough in the preparation of his Direct Testimony and Exhibits. Please provide all spreadsheets with cell formulas intact. Please include all exhibits in native spreadsheets with cell formulas intact.
- A.1-42. See attachments to this question being provided in excel format. Attachment 1 provides the calculations of the Moody's capitalization adjustments. Attachment 2 details the S&P capitalization adjustment calculations. Attachment 3 includes the excel format of the attachment provided in response to PSC 1-3(a). Schedule J in excel format was provided in response to PSC 1-54(j).

Attachment 1 is being provided in a separate file in Excel format. Attachment 2 is being provided in a separate file in Excel format. Attachment 3 is being provided in a separate file in Excel format.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 43

- Q.1-43. Please provide all supporting calculations and documentation that support the numbers for LGE cited by Mr. Arbough on page 9, lines 3 through 16 of his Direct Testimony. Provide all spreadsheets with cell formulas intact.
- A.1-43. See the response to Question No. 42.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 44

- Q.1-44. Please provide all supporting calculations and documentation that support the numbers for LGE cited by Mr. Arbough on page 10, lines 16 through 18 of his Direct Testimony. Provide all spreadsheets with cell formulas intact.
- A.1-44. See the response to Question No. 42.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 45

- Q.1-45. Please provide Schedules J-1, J-1.1, J-1.2, J-2, J-3, and B-1.1 in native spreadsheet format with cell formulas intact.
- A.1-45. See the response to PSC 1-54.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 46

Responding Witness: David S. Sinclair

- Q.1-46. Please provide the remaining service lives for each of the Company's operating coal-fired units relied on in Case No. 2016-00027 to justify or that otherwise were assumed for the proposed environmental projects. Provide all documentation relied on for your response.
- A.1-46. See the response to Question No. 10. In Case No. 2016-00027, the Companies assumed the following:

The Trimble County coal units were assumed to operate until at least 2045. This assumption is documented in Section 2 "Analysis Methodology" on p. 3 of Exhibit CRS-1, "Analysis of 2016 ECR Projects Trimble County Generating Station," in Case No. 2016-00027.

The Mill Creek coal units were assumed to operate until at least 2021. This assumption is documented in Section 2 "Analysis Methodology" on p. 3 of Exhibit CRS-2, "Analysis of 2016 ECR Projects Mill Creek Generating Station," in Case No. 2016-00027.

For the testimony and exhibits in Case No. 2016-00027, see <u>http://psc.ky.gov/pscecf/2016-00027/derek.rahn%40lge-</u>ku.com/01292016114645/6_-_LGE_Testimony_and_Exhibits.pdf.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 47

Responding Witness: Lonnie E. Bellar

- Q.1-47. Please provide a history of transmission capital expenditures and closings to plant in service for each calendar year 2006 through 2015, the base year, and the test year separated into routine projects and specific projects (by project).
- A.1-47. See attached.

Closings to plant in service for each calendar year 2006 through 2015 are not readily available in a manner that can be reproduced.

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
Routine	111398	LT Misc Capital Expenditures	1	683	793	65	-	-	-	-	-	-	-	-
	111398-08	LT Misc Capital Expend 2008	-	-	220	36	(23)	(0)	-	-	-	-	-	-
	117320	SPCC Mods - LG&E Transmission	47	191	674	421	1	(1)	-	-	-	-	-	-
	119656	EMS Consolidation - LGE	81	-	-	-	-	-	-	-	-	-	-	-
	119954	2005 computer purchases LGE	4	-	-	-	-	-	-	-	-	-	-	-
	121429	2006 Computer Purchases LGE	8	1	-	-	-	-	-	-	-	-	-	-
	121490	Firewall for EMS-LGE	27	-	-	-	-	-	-	-	-	-	-	-
	121495	Monarch Lite - LGE	25	16	-	-	-	-	-	-	-	-	-	-
	121567	LGE RTU Purchases-2006	221	-	-	-	-	-	-	-	-	-	-	-
	121575	Upgrade o/s for Video wall	5	-	-	-	-	-	-	-	-	-	-	-
	121576	Flat panel monitors	4	-	-	-	-	-	-	-	-	-	-	-
	122516	Capacitor Installations-LGE	-	-	362	19	-	-	-	-	-	-	-	-
	122519	2007 RTU Purchases-LGE	-	122	6	-	-	-	-	-	-	-	-	-
	122557	OSI EMS Wrkstn Upgrade-LGE	3	-	-	-	-	-	-	-	-	-	-	-
	122606	LG&E RTU REPLACEMENTS- 2006	-	47	2	-	-	-	-	-	-	-	-	-
	122706	OSI Wrkstn Mem Upgrade	-	2	-	-	-	-	-	-	-	-	-	-
	122735	Transmission Office Buildout	-	68	-	-	-	-	-	-	-	-	-	-
	122754	Install OSI Upgrade-LGE 2007	-	23	-	-	-	-	-	-	-	-	-	-
	123649	Routine EMS - LGE	-	-	11	11	-	-	-	-	-	-	-	-
	123798	OpenFEP Database Increase	-	-	6	-	-	-	-	-	-	-	-	-
	125611	09 EMS Database Expan - LGE	-	-	56	-	-	-	-	-	-	-	-	-
	125619	08 EMS Servers & OUG - LGE	-	-	21	2	-	-	-	-	-	-	-	-
	125620	10 EMS Servers & OUG - LGE	-	-	-	-	81	46	-	-	-	-	-	-
	125632	EMS Redundancy LGE	-	-	-	-	175	1	-	-	-	-	-	-
	125836	Spare PTs- LGE	-	-	-	17	-	-	-	-	-	-	-	-
	125850	DFR	-	-	-	394	262	20	0	-	-	-	-	-
	125891	BOC Trans Dept Off Reno	-	-	-	10	-	-	-	-	-	-	-	-
	125951	LR09-Surge-Arrest-Rep	-	-	-	51	8	-	-	-	-	-	-	-
	126012	LU09-Batteries	-	-	-	42	-	-	-	-	-	-	-	-
	126037	Cntrl Ctr Addit. Office Space	-	-	-	1	-	-	-	-	-	-	-	-
	126554	EMS Wkstation & Monitors LGE 2	-	-	-	27	-	-	-	-	-	-	-	-
	126806	Surge Arrestors - LGE-2010	-	-	-	-	29	6	-	-	-	-	-	-
	126807	Batteries - LGE-2010	-	-	-	-	64	(8)	-	-	-	-	-	-
	126810	Instrument Trsfrmr Rplcmnt-LGE	-	-	-	-	39	-	-	-	-	-	-	-
	127254	EMS Software Upgrades- LGE	-	-	-	2	-	-	-	-	-	-	-	-
	127343	Ops Engineering Wrkstation-LGE	-	-	-	-	2	-	-	-	-	-	-	-
	127349	Open Composite Upgrade LGE	-	-	-	-	3	-	-	-	-	-	-	-
	127464	SV Conf. Table- LGE	-	-	-	-	3	-	-	-	-	-	-	-
	127467	LDISCAP10	-	-	-	-	260	12	-	-	-	-	-	-
	127507	PDS/TEST LAN LGE	-	-	-	-	5	-	-	-	-	-	-	-

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
• •	127563	Simpsonville Office Furniture	-	-	-	-	1	-	-	-	-	-	-	-
	127567	Domain Controller - LG&E	-	-	-	-	2	-	-	-	-	-	-	-
	127569	DMZ Servers - LG&E	-	-	-	-	12	-	-	-	-	-	-	-
	130055	SV Bookcases LG&E	-	-	-	-	1	-	-	-	-	-	-	-
	132209	EMS Digital Comm Channels LGE	-	-	-	-	46	-	-	-	-	-	-	-
	132300	EMS Firewalls LGE	-	-	-	-	13	-	-	-	-	-	-	-
	132312	Waterside West Parking	-	-	-	-	7	-	-	-	-	-	-	-
	132688	Dix Ctrl Console Expansion LGE	-	-	-	-	-	6	-	-	-	-	-	-
	132698	Dix Dam Boiler-LG&E	-	-	-	-	-	4	(4)	-	-	-	-	-
	132910	P-Relays-2011	-	-	-	-	-	22	-	-	-	-	-	-
	133510	Sville Remodel - LG&E	-	-	-	-	-	25	1	-	-	-	-	-
	134342	LGE 5th Floor VP Suite	-	-	-	-	-	40	-	-	-	-	-	-
	134411	UPGRADE EMS SOFTWARE LGE	-	-	-	-	-	-	25	40	-	-	-	-
	134750	8 New EMS Workstations LGE	-	-	-	-	-	24	(3)	(0)	-	-	-	-
	134886	SV Drainage Issue	-	-	-	-	-	51	(2)	-	-	-	-	-
	135211	345kV Breaker Repl-LGE-2012	-	-	-	-	-	-	516	27	6	-	-	-
	135285	EMS Laptops LGE	-	-	-	-	-	2	2	-	-	-	-	-
	135287	EMS Satellite Servers LGE	-	-	-	-	-	18	2	-	-	-	-	-
	135825	LGE Test Equipment - 2012	-	-	-	-	-	-	30	(2)	-	-	-	-
	135854	EMS Backup Hware/Sware-LGE	-	-	-	-	-	14	49	-	-	-	-	-
	136117	Computer-Reliability/Perf-LGE	-	-	-	-	-	-	4	-	-	-	-	-
	136192	EMS Workstations 2012 LGE	-	-	-	-	-	-	19	0	-	-	-	-
	136307	System Operations Room 154 LGE	-	-	-	-	-	-	4	(0)	-	-	-	-
	136604	Sville Videoconferencing LG&E	-	-	-	-	-	-	12	-	-	-	-	-
	137570	ROUTINE EMS-LGE 2017	-	-	-	-	-	-	-	-	-	-	-	6
	138784	BOC Remodel - LG&E	-	-	-	-	-	-	3	-	-	-	-	-
	138851	Control Center Chairs - LG&E	-	-	-	-	-	-	6	-	-	-	-	-
	138881	TranServ License Fees-LG&E	-	-	-	-	-	-	-	40	-	-	-	-
	139021	EMS Operator Monitor-LGE-2012	-	-	-	-	-	-	8	3	-	-	-	-
	139157	2013 DIX Battery Replace-LGE	-	-	-	-	-	-	-	3	-	-	-	-
	139439	Comp-related equip-LGE 2013	-	-	-	-	-	-	-	13	24	-	-	-
	139484	Oce Plotwave Printer-LG&E	-	-	-	-	-	-	-	2	1	-	-	-
	139688	Test Lab Equipment-2015-LGE	-	-	-	-	-	-	-	-	-	7	-	-
	139689	Test Lab Equipment-2016-LGE	-	-	-	-	-	-	-	-	-	-	63	-
	139690	Test Lab Equipment-2017-LGE	-	-	-	-	-	-	-	-	-	-	-	9
	140058	EMS DBASE EXPANSION-LGE-2018	-	-	-	-	-	-	-	-	-	-	-	92
	140069	DIGITAL EMS COM CHNLS-LGE-2017	-	-	-	-	-	-	-	-	-	-	-	34
	140080	Upgrade EMS Software-LGE-2014	-	-	-	-	-	-	-	-	152	(2)) -	-
	140091	EMS App Enhancements-LGE-2015	-	-	-	-	-	-	-	-	-	8	-	-
	140097	EMS OPERATOR MONITORS-LGE-2016	-	-	-	-	-	-	-	-	-	-	17	-

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
• •	140224	FULL UPGRD EMS SWARE-LGE-2018	-	-	-	-	-	-	-	-	-	-	-	139
	140388	LGE Test Equipment - 2013	-	-	-	-	-	-	-	26	26	-	-	-
	140957	High Speed Hist Arch LG&E	-	-	-	-	-	-	-	75	-	-	-	-
	142635	2013_EMS_Dbase_Expansion_LGE	-	-	-	-	-	-	-	18	-	-	-	-
	142759	Rplce EMS Wkstations-LGE-2013	-	-	-	-	-	-	-	62	27	-	5	-
	142761	ICCP Domain Cntrlrs-LGE-2013	-	-	-	-	-	-	-	2	4	1	-	-
	142852	LOAD User Licenses-LG&E	-	-	-	-	-	-	-	15	-	-	-	-
	143804	Comp-related Equip-2014-LG&E	-	-	-	-	-	-	-	-	27	(2)	-	-
	146104	Simpsonville Renovation-LG&E	-	-	-	-	-	-	-	-	7	-	-	-
	146794	Comp-related Equip-LGE-2015	-	-	-	-	-	-	-	-	-	35	-	-
	146994	OSI Database Expansion-LGE	-	-	-	-	-	-	-	-	-	40	-	-
	147755	EMS DBASE EXPANSION-LGE-2017	-	-	-	-	-	-	-	-	-	-	-	32
	147787	EMS APP ENHANCEMENTS-LGE-2017	-	-	-	-	-	-	-	-	-	-	-	19
	148502	EMS CHNL EXPANSION-LGE-2015	-	-	-	-	-	-	-	-	-	10	0	-
	149750	Simpsonville Guard Station-LGE	-	-	-	-	-	-	-	-	-	5	-	-
	150096	FUL UPGRD EMS SWARE-LGE-2016	-	-	-	-	-	-	-	-	-	30	84	-
	150120	SIMP CIRCUIT UPDATE-LGE-2015	-	-	-	-	-	-	-	-	-	4	-	-
	150130	Drafting Printer-LG&E	-	-	-	-	-	-	-	-	-	7	-	-
	150306	BW Drafting Printer - LG&E	-	-	-	-	-	-	-	-	-	7	-	-
	150467	Comp-related Equip LGE 2016	-	-	-	-	-	-	-	-	-	-	16	-
	150735	Waterside West Lighting	-	-	-	-	-	-	-	-	-	-	12	-
	151106	LGE Spare Relay Clocks-2016	-	-	-	-	-	-	-	-	-	-	25	-
	151750	Spare 345/138 Transformer	-	-	-	-	-	-	-	-	-	-	-	10
	151756	LGE Breaker Replacements	-	-	-	-	-	-	-	-	-	-	187	255
	151757	LGE Fence Replacements	-	-	-	-	-	-	-	-	-	-	-	1,524
	151760	LGE Transformer Bushing Rpl	-	-	-	-	-	-	-	-	-	-	-	41
	151896	Danville Drafting Plotter-LGE	-	-	-	-	-	-	-	-	-	-	4	-
	152614	LGE Station Grounding	-	-	-	-	-	-	-	-	-	-	17	90
	152615	LGE Spare 345/138 XTR	-	-	-	-	-	-	-	-	-	-	-	65
	152617	2017 Spare 345 Brk-LGE	-	-	-	-	-	-	-	-	-	-	-	52
	152618	LGE Spare 138/69 XTR	-	-	-	-	-	-	-	-	-	-	-	1,500
	152620	LGE Spare Misc Equip	-	-	-	-	-	-	-	-	-	-	-	340
	152621	LGE Cap and Pin Rpl	-	-	-	-	-	-	-	-	-	-	-	1,333
	152632	LGE Coupling Capacitor Rpl	-	-	-	-	-	-	-	-	-	-	-	27
	152639	LGE Online Monitoring Equip	-	-	-	-	-	-	-	-	-	-	-	33
	153280	ROR-LGE SPARE CCVT-2016	-	-	-	-	-	-	-	-	-	-	36	-
	153373	Battery Replacements - LGE	-	-	-	-	-	-	-	-	-	-	-	20
	153374	DFR Installations - LGE	-	-	-	-	-	-	-	-	-	-	-	41
	153375	PLC Replacements - LGE	-	-	-	-	-	-	-	-	-	-	-	11
	L5	T-Lines Relocations	52	46	91	(128)	-	-	-	-	-	-	-	-

Total Company Capital Expeditures \$'000s

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
• •	L5-2009	RELOCATIONS T LINES LGE 2009	-	-	-	14	(14)	-	-	-	-	-	-	-
	L5-2010	RELOCATIONS T LINES LGE 2010	-	-	-	-	7	(0)	(6)	-	-	-	-	-
	L5-2011	RELOCATIONS T LINES LGE 2011	-	-	-	-	-	3	(3)	-	-	-	-	-
	L5-2013	RELOCATION T-LINES	-	-	-	-	-	-	-	(94)	(9)	102	3	-
	L5-2014	RELOCATION T-LINES LG&E	-	-	-	-	-	-	-	-	-	11	-	-
	L5-2015	RELOCATION T-LINES LG&E 2015	-	-	-	-	-	-	-	-	-	80	7	-
	L5-2016	RELOCATIONS T-LINES LG&E 2016	-	-	-	-	-	-	-	-	-	-	52	-
	L5-2017	Relocations T Lines LGE 2017	-	-	-	-	-	-	-	-	-	-	8	25
	L5-2018	Relocations T Lines LGE 2018	-	-	-	-	-	-	-	-	-	-	-	24
	L6	T-Lines New Facilities	89	(58)	9	21	-	-	-	-	-	-	-	-
	L6-2009	NEW FACILITIES T-LINE LGE 2009	-	-	-	44	64	-	-	-	-	-	-	-
	L6-2010	NEW FACILITIES T-LINE LGE 2010	-	-	-	-	19	5	-	-	-	-	-	-
	L6-2011	NEW FACILITIES T-LINE LGE 2011	-	-	-	-	-	0	70	-	-	-	-	-
	L7	T-Lines Parameter Upgrades	33	20	58	(56)	(16)	-	-	-	-	-	-	-
	L7-2008	L7-2008-T-Lines	-	-	14	(14)	-	-	-	-	-	-	-	-
	L7-2009	PARAM UPGRADE T LINE LGE 2009	-	-	-	222	153	-	-	-	-	-	-	-
	L7-2011	PARAM UPGRADE T LINE LGE 2011	-	-	-	-	-	84	17	-	-	-	-	-
	L8-2009	STORM DAMAGE T-LINE LGE 2009	-	-	-	683	16	-	-	-	-	-	-	-
	L8-2010	STORM DAMAGE T-LINE LGE 2010	-	-	-	-	79	-	-	-	-	-	-	-
	L8-2011	STORM DAMAGE T-LINE LGE 2011	-	-	-	-	-	336	(0)	-	-	-	-	-
	L8-2012	STORM DAMAGE T-LINE LGE 2012	-	-	-	-	-	-	347	(21)	0	-	-	-
	L8-2013	STORM DAMAGE T-LINE LGE 2013	-	-	-	-	-	-	-	28	1	-	-	-
	L8-2014	STORM DAMAGE T-LINE LGE 2014	-	-	-	-	-	-	-	-	97	-	-	-
	L8-2015	STORM DAMAGE T-LINE LGE 2015	-	-	-	-	-	-	-	-	-	72	-	-
	L8-2016	STORM DAMAGE T-LINE LGE 2016	-	-	-	-	-	-	-	-	-	-	162	-
	L8-2017	Storm Damage T-Line LGE 2017	-	-	-	-	-	-	-	-	-	-	29	86
	L8-2018	Storm Damage T-Line LGE 2018	-	-	-	-	-	-	-	-	-	-	-	88
	L9-14	PRIORITY REPL T-LINES LGE 2014	-	-	-	-	-	-	-	-	3,061	1,522	-	-
	L9-2009	PRIORITY REPL T-LINES LGE 2009	-	-	-	639	57	3	-	-	-	-	-	-
	L9-2010	PRIORITY REPL T-LINES LGE 2010	-	-	-	-	2,029	119	8	18	-	-	-	-
	L9-2011	PRIORITY REPL T-LINES LGE 2011	-	-	-	-	-	1,594	169	(29)	-	-	-	-
	L9-2012	PRIORITY REPL T-LINE LGE 2012	-	-	-	-	-	-	3,595	235	(1,142)	-	-	-
	L9-2013	PRIORITY REPL T-LINES LGE 2013	-	-	-	-	-	-	-	3,316	457	(141)	-	-
	L9-2015	PRIORITY REPL T-LINES LGE 2015	-	-	-	-	-	-	-	-	-	4,183	(630)	-
	L9-2016	PRIORITY REPL T-LINES LGE 2016	-	-	-	-	-	-	-	-	-	-	745	-
	L9-2017	Priority Repl T-Lines LGE 2017	-	-	-	-	-	-	-	-	-	-	193	1,148
	L9-2018	Priority Repl T-Lines LGE 2018	-	-	-	-	-	-	-	-	-	-	-	2,459
		PRIORITY REPL X-ARMS LGE 2015	-	-	-	-	-	-	-	-	-	217	-	-
		Priority Repl X-Arms LGE 2016	-	-	-	-	-	-	-	-	-	-	33	-
	LARM-2017	Priority Repl X-Arms LGE 2017	-	-	-	-	-	-	-	-	-	-	16	93

Attachment #1 to Response to KIUC-1 Question No. 47 Page 4 of 13 Bellar

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
-580	•	LGE Arrester Replacements 2017	-	-	-	-	-	-		-	-	-	-	202
		BATTERIES BLANKET LGE 2011	-	-	-	-	-	60	-	-	-	_	_	
		2 Batteries LGE 2012	-	-	-	-	-	-	7	-	-	-	-	-
		3 Batteries LGE 2013	-	-	-	-	-	-	-	133	-	-	-	-
	LBR-10	LGE Breakers	-	-	-	-	571	(569)	-	-	-	-	-	-
	LBR-11	LGE Breakers11	-	-	-	-	-	1,722	(485)	8	-	-	-	-
	LBR-12	LGE Breakers Replacements-2012	-	-	-	-	-	-	542	148	-	_	_	-
	LBR-13	LGE Breakers Replacements-2013	-	-	-	-	-	-	-	1,989	(568)	(148)	(76)	-
	LBR-14	LG&E Breaker Replacements 2014	-	-	-	-	-	-	-	-	334	4	-	-
		LGE-Brkr Fail-2014	-	-	-	-	-	-	-	-	107	11	21	-
		LGE-Brkr Fail-2015	-	-	-	-	-	-	-	-	-	111	16	-
		LGE-Brkr Fail-2016	-	-	-	-	-	-	-	-	-	-	296	-
		LGE-Brkr Fail-2017	-	-	-	-	-	-	-	-	-	_	-	225
		LFENCE-12	-	-	-	-	-	-	164	97	-	_	_	
		LFENCE-13	-	-	-	-	-	-	-	92	-	_	_	-
		2 Grounding RepairsLGE-2012	-	-	-	-	-	-	73	(73)	-	_	-	-
	LINS-2015	PRIORITY REPL INSLTRS LGE 2015	-	-	-	-	-	-	-	-	-	35	-	-
	LINS-2016	Priority Repl Insltrs LGE 2016	-	-	-	-	-	-	-	-	-	-	67	-
	LINS-2017	Priority Repl Insltrs LGE 2017	-	-	-	-	-	-	-	-	-	_	18	109
	LINS-2018	Priority Repl Insltrs LGE 2018	-	-	-	-	-	-	-	-	-	-	-	81
		INSTRUMENT TRANSFMR LGE 2011	-	-	-	-	-	74	1	-	-	-	-	_
		LGE-OtherFail-2014	-	-	-	-	-	_	-	-	108	5	(18)	-
		LGE-OtherFail-2015	-	-	-	-	-	-	-	-	-	38	-	-
		LGE-OtherFail-2016	-	-	-	-	-	-	-	-	-	-	125	-
		LGE-OtherFail-2017	-	-	-	-	-	-	-	-	-	-	-	225
	LOTH-2016	Priority Repl Other LGE 2016	-	-	-	-	-	-	-	-	-	-	193	-
		Priority Repl Other LGE 2017	-	-	-	-	-	-	-	-	-	-	25	75
		Priority Repl Other LGE 2018	-	-	-	-	-	-	-	-	-	-	-	75
		LGE-Other-2014	-	-	-	-	-	-	-	-	432	61	-	-
	L-OTHER15	LGE-Other-2015	-	-	-	-	-	-	-	-	-	804	196	-
	LOTPR14	LG&E Other Prot Blanket 2014	-	-	-	-	-	-	-	-	68	59	29	-
	LOTPR15	LG&E Other Prot Blanket 2015	-	-	-	-	-	-	-	-	-	160	(29)	-
	LOTPR16	LG&E Other Prot Blanket 2016	-	-	-	-	-	-	-	-	-	-	215	-
	LOTPR18	LG&E Other Prot Blanket 2018	-	-	-	-	-	-	-	-	-	-	-	14
	LOTPRFL16	LG&E Oth Prot Fail 2016	-	-	-	-	-	-	-	-	-	-	36	-
	LOTPRFL17	LG&E Oth Prot Fail 2017	-	-	-	-	-	-	-	-	-	-	-	6
		LG&E RELAY-12	-	-	-	-	-	-	86	(19)	24	-	-	-
	LRELAY-13	LG&E RELAY-13	-	-	-	-	-	-	-	239	(10)	(87)	-	-
	LRELAY-14	Relay Replacements-LG&E-2014	-	-	-	-	-	-	-	-	803	236	(192)	-
		Relay Replacements-LG&E-2015	-	-	-	-	-	-	-	-	-	723	225	-

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
	LRELAY-17	Relay Replacements-LG&E-2017	-	-	-	-	-	-	-	-	-	-	62	108
		LG&E Relay Failures-2014	-	-	-	-	-	-	-	-	69	56	-	-
		LG&E Relay Failures-2017	-	-	-	-	-	-	-	-	-	-	(3)	-
		LG&E Relay Failures-2016	-	-	-	-	-	-	-	-	-	-	220	-
	LREL-FL17	LG&E Relay Failures-2017	-	-	-	-	-	-	-	-	-	-	-	68
	LREL-FL18	LG&E Relay Failures-2018	-	-	-	-	-	-	-	-	-	-	-	59
	LRSUB-09	Routine Sub Capital09- LGE	-	-	-	58	6	-	-	-	-	-	-	-
	LRSUB-10	LG&E Routine - Subs-10	-	-	-	-	668	(398)	(19)	-	-	-	-	-
	LRSUB-11	LG&E Routine - Subs-11	-	-	-	-	-	952	1,305	(25)	-	0	-	-
	LRSUB-12	LG&E Routine - Subs-12	-	-	-	-	-	-	131	181	(0)	-	-	-
	LRSUB-13	LG&E Routine - Subs-13	-	-	-	-	-	-	-	305	390	5	-	-
	LRTU-10	LGE RTU10	-	-	-	-	4	-	-	-	-	-	-	-
	LRTU-11	LGE RTU11	-	-	-	-	-	15	-	-	-	-	-	-
	LRTU-12	LGE RTU Replacements-12	-	-	-	-	-	-	9	2	(0)	-	-	-
	LRTU-13	LGE RTU Replacements-13	-	-	-	-	-	-	-	19	-	-	-	-
	LRTU-16	LGE RTU Replacements-16	-	-	-	-	-	-	-	-	-	-	621	-
	LRTU-17	LGE RTU Replacements-17	-	-	-	-	-	-	-	-	-	-	-	855
	LRTU-18	LGE RTU Replacements-18	-	-	-	-	-	-	-	-	-	-	-	885
	LRTU-FL16	LG&E RTU Failures-2016	-	-	-	-	-	-	-	-	-	-	26	-
	LRTU-FL17	LG&E RTU Failures-2017	-	-	-	-	-	-	-	-	-	-	-	3
	LSTSVC12	Station Svc Trnsfrmrs-LG&E-12	-	-	-	-	-	-	72	29	-	-	-	-
	LSURGE-11	Surge Arrestors LGE-11	-	-	-	-	-	108	0	-	-	-	-	-
	LSURGE-12	Surge Arrestors LGE-12	-	-	-	-	-	-	53	(0)	(1)	-	-	-
	LSURGE-13	Surge Arrestors LGE-13	-	-	-	-	-	-	-	13	-	(11)	-	-
	LSWT-2015	PRIORITY REPL SWTCHS LGE 2015	-	-	-	-	-	-	-	-	-	17	-	-
	LT8	LT8	81	44	120	33	-	-	-	-	-	-	-	-
	LT8-2008	LT8 Blanket in 2008	-	-	318	(1)	-	-	-	-	-	-	-	-
	LT9	LT9	1,638	1,500	411	(90)	-	-	-	-	-	-	-	-
	LT9-2008	LT-9-2008	-	-	690	171	19	-	-	-	-	-	-	-
	LTFFAIL16	LGE-Xfrmr Fail-2016	-	-	-	-	-	-	-	-	-	-	452	-
	LTFFAIL17	LGE-Xfrmr Fail-2017	-	-	-	-	-	-	-	-	-	-	-	1,500
	LTFFAIL18	LGE-Xfrmr Fail-2018	-	-	-	-	-	-	-	-	-	-	-	1,301
	LTSUB-09	Terminal Upgrades09-LGE	-	-	-	42	24	-	-	-	-	-	-	-
Routine To	tal		2,477	3,054	3,854	2,723	4,564	4,453	6,947	7,165	4,657	8,300	3,593	15,390
	112750	FORD - MIDDLETOWN 138 KV LINE	1,258	(2)	(181)	(131)	-	-	-	-	-	-	-	-
	112957	Ford Substation Expansion	97	-	-	-	-	-	-	-	-	-	-	-
	112959	Middletown 138 kV Addition	12	-	-	-	-	-	-	-	-	-	-	-
	113886	WORTHINGTON 69KV LOOP FEED.	74	-	-	-	-	-	-	-	-	-	-	-
	114128	Bluelick-Beulah 69 KV line	-	86	-	-	-	-	-	-	-	-	-	-
	115310	Dual Port LGE tie RTU's	1	-	-	-	-	-	-	-	-	-	-	-

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
51	115523	WHAS-CENTERFIELD 69KV 6686	(11)	(12)	-	-	-	-	-	-	-	-	-	
	115524	Middletwn-Centerfield ckt.3846	(15)	12	-	-	-	-	-	-	-	-	-	-
	116473	MT 138-69kV, 150MVA	(3)	-	-	-	-	-	-	-	-	-	-	-
	117130	Middletwn-Trimble 345kV twr.	(18)	-	-	(0)	-	-	-	-	-	-	-	-
	117207	Canal - Del Park 69kv (6616)	-	7	1	(31)	-	-	-	-	-	-	-	-
	117679	Middletown 138kV Line Exit	24	-	-	-	-	-	-	-	-	-	-	-
	118209	Trimble 2 Transmission lge	3,213	6,852	7,830	15,893	1,289	168	(44)	39	(39)	-	-	-
	118272	6671 P2 2004	33	-	-	-	-	-	-	-	-	-	-	-
	118387	6665 P2 2004	38	-	-	-	-	-	-	-	-	-	-	-
	118401	Mud Lane - Smyrna 69kv Survey	850	-	217	-	-	-	-	-	-	-	-	-
	119260	MT 138kV Reactors	(13)	-	-	-	-	-	-	-	-	-	-	-
	119539	Ford - Middletown 69 kv (DC)	351	-	(29)	-	-	-	-	-	-	-	-	-
	119923	Replace Bushing on Canal-6608	(2)	-	-	-	-	-	-	-	-	-	-	-
	120113	MILL CREEK-KOSMOSDALE 138KV	18	-	-	-	-	-	-	-	-	-	-	-
	120218	Lyndon South Bkr Replacement	24	0	(0)	-	-	-	-	-	-	-	-	-
	120247	3847 SYSTEM PARA 2005	9	-		-	-	-	-	-	-	-	-	-
	120252	Clay Bus Tie Bkr Replacement	5	-	-	-	-	-	-	-	-	-	-	-
	120316	BR-138-69 kV (BR6) Replacement	2	34	-	-	(7)	-	-	-	-	-	-	-
	120373	6688 P2 2005	75	29	-	18	-	-	-	-	-	-	-	-
	120374	3838 P2 2005	144	(12)	-	-	-	-	-	-	-	-	-	-
	120519	Grady RTU Rep. and PT Addition	4	-	-	-	-	-	-	-	-	-	-	-
	120662	Relo 3pls Locust Crk Delv	17	-	-	-	-	-	-	-	-	-	-	-
	120709	Lyndon RTU Replacement	1	-	-	-	-	-	-	-	-	-	-	-
	120835	Relo 4pls Notting Hills Delv	34	-	-	-	-	-	-	-	-	-	-	-
	120850	Blue Lick, BL-2 WTI CT modifi	(13)	-	-	-	-	-	-	-	-	-	-	-
	121089	Oxmoor HCB Panel Repl.	41	0	(0)	-	-	-	-	-	-	-	-	-
	121090	Breckinridge HCB Panel Repl.	50	0	(0)	-	-	-	-	-	-	-	-	-
	121107	TIP TOP STA SER #2	2	-	-	-	-	-	-	-	-	-	-	-
	121151	6623 River Park Relo	-	0	-	-	-	(3)	-	-	-	-	-	-
	121155	Dahlia HCB Panels (2) Repl.	80	0	-	-	-	-	-	-	-	-	-	-
	121156	Ethel HCB Panel Repl.	53	0	-	-	-	-	-	-	-	-	-	-
	121157	Highland HCB Panel Repl.	50	-	-	-	-	-	-	-	-	-	-	-
	121249	Paddys Run 3311B Repl	53	9	-	-	-	-	-	-	-	-	-	-
	121250	Campground 3801 Repl.	15	-	-	-	(71)	-	-	-	-	-	-	-
	121298	Cntrl Ctr Construction-LGE	58	2,384	2,575	(0)	-	-	-	-	-	-	-	-
	121327	Beargrass Pump RTU Replacement	1	-	-	-	-	-	-	-	-	-	-	-
	121343	LEBANON JUNCTION	162	129	-	-	-	-	-	-	-	-	-	-
	121416	Ethel Battery Replacement	21	1	-	-	-	-	-	-	-	-	-	-
	121456	MC 4531 CCVT	17	0	(0)	-	-	-	-	-	-	-	-	-
	121509	LY: Replace 6654 disc sw	11	1	-	-	-	-	-	-	-	-	-	-

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
•••	121536	BLUELICK 345KV DISCONNECTS	40	0	(0)	-	-	-	-	-	-	-	-	
	121551	MT-Increase 4543 Term Limit	3	2	-	-	-	-	-	-	-	-	-	-
	121577	TC 847 Line Tie Disc	10	21	0	-	-	-	-	-	-	-	-	-
	121621	MT 3870 Bus Wire Upgrade	6	-	-	-	-	-	-	-	-	-	-	-
	121630	ETHEL 138KV INSULATORS	10	26	-	-	-	-	-	-	-	-	-	-
	121670	Shively RTU Replacement	15	23	-	-	-	-	-	-	-	-	-	-
	121708	Replace Bushing on SP-6676	4	-	-	-	-	-	-	-	-	-	-	-
	121822	BL-Bullitt Co 161kV Dble Ckt	53	-	(53)	-	-	-	-	-	-	-	-	-
	121915	Jeffersonville RTU Addition	11	2	-	-	-	-	-	-	-	-	-	-
	122092	Hancock RTU Replacement	8	3	(0)	-	-	-	-	-	-	-	-	-
	122215	PR Carrier Replacement	65	7	(0)	-	-	-	-	-	-	-	-	-
	122231	Waterside Arena-Transmission	-	(0)	0	29	(29)	-	-	-	-	-	-	-
	122248	EKP Cedar Grove GOAB 161	12	(12)	-	(2)	-	-	-	-	-	-	-	-
	122440	MILL CREEK CONTROL HOUSE ROOF	40	1	-	-	-	-	-	-	-	-	-	-
	122480	Aux Gen fuel tank-Waterside	-	16	-	-	-	-	-	-	-	-	-	-
	122512	MT 138kV Collins termination	-	6	322	571	372	41	0	-	-	-	-	-
	122513	Middletown-Collins 138kV Line	-	-	344	649	2,448	8	(13)	-	-	-	-	-
	122514	Collins 138/69kV 150MVA Trnsfr	-	28	549	887	1,036	258	0	-	-	-	-	-
	122805	Museum Plaza Tower Reloc	-	336	148	1,585	(72)	(97)	(0)	-	-	-	-	-
	123146	Relocate Video Wall to Dix	-	15	-	-	-	-	-	-	-	-	-	-
	123235	Backup CC Comm KU/LGE	-	-	-	23	-	-	-	-	-	-	-	-
	123360	Move Video Wall to DCC	-	4	-	-	-	-	-	-	-	-	-	-
	123383	Northside-Clifty Upgrade-P1	-	-	823	25	-	-	-	-	-	-	-	-
	123696	Dist Conestoga 69kV Tap	-	-	54	596	8	-	-	-	-	-	-	-
	123795	Dist Eastwood West Tap	-	-	7	52	13	271	28	-	-	-	-	-
	123816	Compliance Doc. Software	-	-	36	-	-	-	-	-	-	-	-	-
	123835	*CHAMBERLAIN LANE HWY RELO	-	-	28	89	105	-	-	-	-	-	-	-
	124458	MT 6652 & 6654 Brkr Repl	-	-	202	26	(0)	-	-	-	-	-	-	-
	124459	LBR09-ReplMT6601&6657Brkrs	-	-	180	62	-	-	-	-	-	-	-	-
	124549	Aspen Software Purchase	-	-	26	-	-	-	-	-	-	-	-	-
	124606	POWER LINE METERS - COMPLIANCE	-	-	9	-	-	-	-	-	-	-	-	-
	125265	Skylight-Penal Farm 69kV	-	-	-	-	-	-	1,383	9	-	-	-	-
	125742	Blackboard Application- LGE	-	-	4	-	-	-	-	-	-	-	-	-
	125745	Dix Dam Network UG- LGE	-	-	20	-	-	-	-	-	-	-	-	-
	125807	Replace Canal 69kV DB PTs	-	-	-	29	-	-	-	-	-	-	-	-
	125903	Upgrade Algonquin TR 5 69 kV	-	-	-	42	(42)	-	-	-	-	-	-	-
	125952	LBR09-ReplCanalBrk3861	-	-	-	155	5	-	-	-	-	-	-	-
	125953	LBR09-ReplCliftonBkr6624	-	-	-	77	-	-	-	-	-	-	-	-
	125954	LBR09-SeminoleBkr69Tie1-2	-	-	-	69	-	-	-	-	-	-	-	-
	125964	LBR09-ReplMCBkr138TR7&8	-	-	-	137	-	-	-	-	-	-	-	-

Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
• •	125965	LBR09-ReplMCBkr3855	-	-	-	137	-	-	-	-	-	-	-	-
	126010	LR09-BG-NS-3883-Relays	-	-	-	83	0	-	-	-	-	-	-	-
	126181	Old Henry 138KV Tap	-	-	-	27	400	0	-	-	-	-	-	-
	126317	SVFRQ Source	-	-	-	1	-	-	-	-	-	-	-	-
	126468	6617 Underground Cable Repair	-	-	-	493	5	-	-	-	-	-	-	-
	127152	Openview.NET- LGE	-	-	-	-	-	101	(15)	-	-	-	-	-
	127158	LGE 2011	-	-	-	-	-	21	-	-	-	-	-	-
	127175	'Work Mgmt/FRP software - LG&E	-	-	-	-	825	625	(3)	2	-	-	-	-
	127253	NS.Reactor-Install	-	-	-	-	311	-	-	-	-	-	-	-
	127291	345kV-BKR RET-TC	-	-	-	0	2	(157)	-	-	-	-	-	-
	127295	EW-6658 BKR UPGRADE	-	-	-	-	13	0	-	-	-	-	-	-
	127373	MillCrkFenceWk	-	-	-	-	241	-	-	-	-	-	-	-
	127381	PaddRun-XFMR-Rep	-	-	-	-	1,643	94	0	-	-	-	-	-
	127393	Symrna Cap Bank	-	-	-	-	276	55	0	-	-	-	-	-
	127397	LBR10-MC-Brkrs	-	-	-	-	408	1	-	-	-	-	-	-
	127398	LBR10-FH69kVBusT	-	-	-	-	13	-	-	-	-	-	-	-
	127399	LBR10-PRun-6636A	-	-	-	-	108	0	-	-	-	-	-	-
	127411	LBR10-Aiken6650	-	-	-	-	94	0	-	-	-	-	-	-
	127470	LR10-TC-4542-Relays	-	-	-	-	99	1	-	-	-	-	-	-
	130638	Tip Top Breaker Replacement	-	-	-	-	230	348	0	-	-	-	-	-
	130898	Lou Upgd-Middletown 345kV Brkr	-	-	-	-	1	2,130	587	0	-	-	-	-
	131314	Lou Upgr-New Albany-Subs	-	-	-	-	-	-	63	3,065	9,143	1,940	12	-
	131342	Middletown Control House	-	-	-	-	-	-	1,439	783	436	(11)	-	-
	131443	KENZIG ROAD	-	-	-	-	-	-	44	2,331	8,066	719	-	-
	131701	Lou Upgrades-Midtown 4th Xfrmr	-	-	-	-	-	-	3,862	4,386	3,730	230	-	-
	131849	LGE-2015	-	-	-	-	-	-	-	-	-	151	0	-
	131851	LGE-2016	-	-	-	-	-	-	-	-	-	-	50	-
	131852	LGE-2017	-	-	-	-	-	-	-	-	-	-	-	42
	132089	ET-Brkr-Replc	-	-	-	-	48	18	-	-	-	-	-	-
	132090	ET-Xfrmr-Replc	-	-	-	-	-	200	-	13	-	-	-	-
	132097	Simpsonville Switch Gear LGE	-	-	-	-	34	-	-	-	-	-	-	-
	132475	MC-Brkrs-Rplc	-	-	-	-	-	1,106	0	3	-	-	-	-
	132611	PowerBase - LGE	-	-	-	-	-	232	0	-	-	-	-	-
	132730	QAS for EMS LGE	-	-	-	-	-	186	(8)	-	-	-	-	-
	132809	4535 NRTHSD SBSTN PARA	-	-	-	-	-	159	39	(7)	-	-	-	-
	132812	4560 MILCRK SBSTN PARA	-	-	-	-	-	150	5	-	-	-	-	-
	132870	LGE	-	-	-	-	-	-	121	81	-	-	-	-
	132881	4533 MILL CREEK 345 PARA	-	-	-	-	-	1	396	(4)	-	-	-	-
	132883	4531 MILL CREEK 345 PARA	-	-	-	-	-	1	209	19	-	-	-	-
	132884	4532 MILL CREEK 345 PARA	-	-	-	-	-	1	209	-	-	-	-	-

Туре	Project # 132888 132905	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Period	Period
	122005	EMS CC Switchover - LG&E	-	-	-	-	-	840	463	13	(8)	-	-	-
	152905	AP-Relays-2011	-	-	-	-	-	2	(2)	-	-	-	-	-
	132907	MT-Relays-2011	-	-	-	-	-	108	1	-	-	-	-	-
	132908	MC-Relays-2011	-	-	-	-	-	32	4	-	-	-	-	-
	132909	NS-Relays-2011	-	-	-	-	-	19	0	-	-	-	-	-
	132911	PW-Relays-2011	-	-	-	-	-	95	2	-	-	-	-	-
	132912	TC-Relays-2011	-	-	-	-	-	35	-	-	-	-	-	-
	133029	4533 LRC RE-SAG	-	-	-	-	-	115	(3)	-	-	-	-	-
	133322	NERCALRT-OH FLS-PDYW	-	-	-	-	-	-	-	527	(9)	-	-	-
	133324	NERCALRT-ASHBM-MNSLK	-	-	-	-	-	-	-	138	-	-	-	-
	133337	NERCALRT-PLSRRDG TAP	-	-	-	-	-	-	24	6	-	-	-	-
	133338	NERCALRT-CNRNST-ASB2	-	-	-	-	-	-	16	33	-	-	-	-
	133339	NERCALRT-CLVRPT-TPTP	-	-	-	-	-	-	487	56	-	-	-	-
	133340	NERCALRT-BRGRS-WTRSD	-	-	-	-	-	-	-	771	71	-	-	-
	133344	NERCALRT-MD LN-OKLNA	-	-	-	-	-	-	-	331	(0)	-	-	-
	133346	NERCALRT-NRTHSD-BRGS	-	-	-	-	-	-	-	1,374	543	(9)	-	-
	133387	NERCALRT-CANAL TAP	-	-	-	-	-	-	1,795	125	-	-	-	-
	133445	NERCALRT-MGZN-WTRSD	-	-	-	-	-	-	120	(3)	-	-	-	-
	133460	NERCALRT-CNTRFD-MDTN	-	-	-	-	-	-	96	8	-	-	-	-
	133467	NERCALRT-HNCK-MGZN	-	-	-	-	-	-	93	5	-	-	-	-
	133469	NERCALRT-CNL-WTRSD	-	-	-	-	-	-	126	-	-	-	-	-
	133481	NERCALRT-APPRK-ETHL	-	-	-	-	-	-	6	4	-	-	-	-
	133978	NERCALRT-TVA-PDYS RN	-	-	-	-	-	-	1	828	(8)	-	-	-
	134195	DSP RUSSELL CRNR SUB	-	-	-	-	-	-	-	-	-	-	8	-
	134204	DSP MT WSHNGTN SUB	-	-	-	-	-	-	-	-	-	-	-	377
	134206	MTWN#4-TRSFMR-LINES	-	-	-	-	-	-	580	(68)	0	-	-	-
	134227	NERCALRT-FRNVLY-GDLN	-	-	-	-	-	-	-	-	134	-	-	-
	134230	NERCALRT-MLCK-ASHBY	-	-	-	-	-	-	-	-	26	2	-	-
	134242	LGE-2013	-	-	-	-	-	-	-	250	230	6	0	-
	134268	NERCALRT-PLAINVIEWTAP	-	-	-	-	-	-	-	-	284	7	-	-
	134295	PRESTON HWY RELOCATION	-	-	-	-	-	-	-	-	1	8	-	-
	134296	LOUISVILLE EAST END BRIDGE	-	-	-	-	-	-	18	(6)	(12)	22	-	-
	134406	REPLACE SIMP VIDEO WALL-LGE	-	-	-	-	-	-	-	-	-	230	-	-
	134624	New 138kV CR7 SW Yard-Network	-	-	-	-	-	-	-	6,121	2,135	461	0	-
	134664	Back-up Trans Control Ctr LGE	-	-	-	-	-	-	40	13	(53)	-	-	-
	135246	Relocate 138kV CR7 Lines	-	-	-	-	-	-	-	865	851	70	-	-
	135266	New 345kV CR7 Line	-	-	-	-	-	-	-	908	1,360	333	-	-
	135529	CSXT RELO 6649	-	-	-	-	-	180	(172)	-	-	-	-	-
	135642	MicroSCADA Generation LGE	-	-	-	-	-	14	(4)	-	-	-	-	-
	135809	Trans Operator Log Sys-LG&E	-	-	-	-	-	58	-	-	-	-	-	-

T	D	Desta d Name	2007	2007	2009	2000	2010	2011	2012	2012	2014	2015	Base	Test
Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012 170	2013	2014	2015	Period	Period
	135917	NERCALRT-APPRK-MDLTN	-	-	-	-	-	-		(80)	-	-	-	-
	135918	New 345kV CR Brkrs at Paddys W	-	-	-	-	-	-	-	500	906	-	-	-
	135947	Draw DT/Enhance AutoCAD-LGE	-	-	-	-	-	-	91	0	-	-	-	-
	136170	AP-SADE-LGE	-	-	-	-	-	-	56	2	-	-	-	-
	136229	NERCALRT-CLFTY-CGE	-	-	-	-	-	-	781	260	-	-	-	-
	136603	TransOpLog II-LGE	-	-	-	-	-	-	34	15	-	-	-	-
	136977	Rpl 138kV Brkrs at CRS & PW	-	-	-	-	-	-	-	1,589	2,028	134	-	-
	136978	Cane Run 345kV Xfrmr - LGE	-	-	-	-	-	-	257	3,054	(26)	-	-	-
	137363	Tip Top Xfrmr TR2 Rpl	-	-	-	-	-	-	-	1,323	(5)	-	-	-
	137550	Cascade Phase II - LGE	-	-	-	-	-	-	61	124	21	-	-	-
	137763	RIVER RD HWY RELO	-	-	-	-	-	-	-	-	-	-	-	1,342
	137772	TRODS - LG&E	-	-	-	-	-	-	-	17	3	-	-	-
	138681	Trimble Co 5 Xfrmr Repl	-	-	-	-	-	-	322	4,374	17	-	-	-
	138691	TWR LGHTNG-LGE	-	-	-	-	-	-	-	531	33	-	-	-
	138828	Cane Run Control House-LGE	-	-	-	-	-	-	-	1,486	277	-	-	-
	138999	Linux Identity Manager - LGE	-	-	-	-	-	-	2	1	-	-	-	-
	139218	New 138kV CR7 SW Yard-Intrcn	-	-	-	-	-	-	-	1,707	(1,707)	(0)	(0)	-
	139480	Mill Creek 4531 Brkr	-	-	-	-	-	-	-	459	(6)	-	-	-
	139656	Mapboard Upgrade-LGE-2013	-	-	-	-	-	-	-	34	1	-	-	-
	139668	TEP-KWD-ASHBTM-69MOT	-	-	-	-	-	-	-	1,022	1,310	(9)	-	-
	140017	Dix Upgrade - LGE 2014	-	-	-	-	-	-	-	-	89	-	(89)	-
	140228	NERCALRT-KNOBCRK-TIPTOP	-	-	-	-	-	-	-	-	195	-	-	-
	141220	EMS AIRGAP SVRS-2013-LGE	-	-	-	-	-	-	-	29	1	-	-	-
	142798	IPS Device for QAS-LGE-2013	-	-	-	-	-	-	-	10	-	2	-	-
	142861	FORD-MDLTN-RELO	-	-	-	-	-	-	-	-	2,162	(2)	-	-
	142932	TIPTOP-BRNDNBRG-6619	-	-	-	-	-	-	-	-	629	-	-	-
	142933	TIP-TOP-OLIN-6620	-	-	-	-	-	-	-	-	311	-	-	-
	142943	Load Model Power Sys Stab-LGE	-	-	-	-	-	-	-	-	13	-	-	-
	143650	Video Wall at Dix 2014 - LG&E	-	-	-	-	-	-	-	-	30	-	-	-
	143866	Trimble County TR6 Cleanup/Rpl	-	-	-	-	-	-	-	-	2,704	245	122	-
	144110	BACKUP CC V_WALL RPLC-LGE-2016	-	-	-	-	-	-	-	-	-	-	22	-
	144126	Rpl Mud Lane 6676 & 3877 Brkrs	-	-	-	-	-	-	-	-	-	266	152	-
	144127	Rpl South Park 6676 Brkr	-	-	-	-	-	-	-	-	-	37	(13)	-
	144130	Rpl (5) Cloverport 138kV Brks	-	-	-	-	-	-	_	_	-	1,012	25	-
	144132	Rpl TC-138kV BUS TIE Brkr	-	_	-	-	-	-	-	-	-	1,012	119	-
	144135	Rpl (2) Mill Creek 345kV Brkrs	-	_	-	-	-	-	-	-	469	409	-	-
	144159	Rpl Seminole Fence	-	_	-	-	-	-	-	-	42	-	-	-
	144330	New 69kV Bkr Station MC-CRSW	_	_	_	_	_	_	_	-	-	155	893	_
	144550	Rpl Paddys Run Fence	-	_	-	-	-	_	-	-	-	274	-	-
	144530	MILL CREEK RELOCATION	-	-	-	-	-	-	-	-	-	398	- 21	-
	144020	WILL CREEK RELOCATION	-	-	-	-	-	-	-	-	-	370	21	-

													Base	Test
Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Period	Period
	144666	Tip Top TR3 Xfmr Rpl	-	-	-	-	-	-	-	-	406	0	-	-
	144683	TEP-DFR Replace MODs-LGE	-	-	-	-	-	-	-	-	-	207	0	-
	145796	Mud Lane TR4 Transformer Rpl	-	-	-	-	-	-	-	-	1,650	(44)	18	-
	146329	REL 345 ROW WIDENING	-	-	-	-	-	-	-	-	670	888	3	-
	146545	Sale of Easement	-	-	-	-	-	-	-	-	-	(32)	-	-
	146686	REL 345 ROW Blue Lck-Mdtwn	-	-	-	-	-	-	-	-	-	1,000	21	-
	146709	OUTERLOOP LANDFILL RELO	-	-	-	-	-	-	-	-	-	-	(1)	(20)
	146840	HRDS CRK-HRMNY LNDG P2	-	-	-	-	-	-	-	-	-	1,271	-	-
	146860	SPIR OHIO FALLS	-	-	-	-	-	-	-	-	-	232	-	-
	146862	SPIR 3821 CN RN-CN RN SWTCHNG	-	-	-	-	-	-	-	-	-	78	-	-
	146863	SPIR 3822 CN RN-CN RUN SWTCHNG	-	-	-	-	-	-	-	-	-	204	-	-
	146865	SPIR CN RN SWT-ASH BOTTOM	-	-	-	-	-	-	-	-	-	92	-	-
	147118	MC 4503 & 4503-33 TIE Brkrs	-	-	-	-	-	-	-	-	-	578	488	-
	147244	TEP ETHEL-NACHAND 69kV-	-	-	-	-	-	-	-	-	-	-	1,159	-
	147308	Lyndon S Potential Xfrmr Rpl	-	-	-	-	-	-	-	-	-	-	44	-
	147312	Mill Creek 532 Line CCVT Rpl	-	-	-	-	-	-	-	-	-	-	92	-
	147328	PR Trimble Co-Centerfield	-	-	-	-	-	-	-	-	-	-	1,599	-
	147330	PR Harmony Landing-Skylight	-	-	-	-	-	-	-	-	-	-	1,045	-
	147353	Paddy's Run Bushings	-	-	-	-	-	-	-	-	-	-	35	-
	147357	Mud Lane Insulator Rpl	-	-	-	-	-	-	-	-	-	-	402	-
	147819	SPIR Project LGE 2016-2025	-	-	-	-	-	-	-	-	-	-	-	347
	147997	TEP-Rpl TC 345kV Switches	-	-	-	-	-	-	-	-	-	-	257	-
	148821	SR Floyd-Seminole 69kV	-	-	-	-	-	-	-	-	-	-	-	1,632
	148857	Oxmoor Underground Repl	-	-	-	-	-	-	-	-	-	-	517	-
	148988	Blue Lick DFR	-	-	-	-	-	-	-	-	-	-	30	18
	149028	TEP-LGE DFR 2016	-	-	-	-	-	-	-	-	-	-	225	-
	149679	Middletown	-	-	-	-	-	-	-	-	-	-	-	2,500
	150082	PR Knob Creek-Tip Top	-	-	-	-	-	-	-	-	-	594	4	-
	150254	Algonquin OCB Kit Install	-	-	-	-	-	-	-	-	-	14	-	-
	150258	Paddys Run OCB Kit Install	-	-	-	-	-	-	-	-	-	15	-	-
	150637	TEP-Middletown Brkr Rpl (3)	-	-	-	-	-	-	-	-	-	-	522	-
	150650	PR Middletown-Centerfield	-	-	-	-	-	-	-	-	-	-	600	-
	150734	Middletown TR2 Bushing Rpl	-	-	-	-	-	-	-	-	-	-	51	-
	150804	OATI Software Change - LGE	-	-	-	-	-	-	-	-	-	-	21	-
	151179	Clifty Creek Brkr Compress	-	-	-	-	-	-	-	-	-	-	31	-
	151208	Mill Creek 4533 Brk Rpl	-	-	-	-	-	-	-	-	-	-	784	-
	151305	Algonquin PT Rpl	-	-	-	-	-	-	-	-	-	-	28	-
	151306	Paddys Run PT Rpl	-	-	-	-	-	-	-	-	-	-	85	-
	151307	Clay 69kV BUS TIE Bush Rpl	-	-	-	-	-	-	-	-	-	-	33	-
	151466	MT 345 Bus Redundancy	-	-	-	-	-	-	-	-	-	-	-	4
		•												

\$ 0003	Туре	Project #	Project Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Base Period	Test Period
		151467	Cane Run SW CT Add	-	-	-	-	-	-	-	-	-	-	344	-
		151601	Louisville RFL9300 RPLS	-	-	-	-	-	-	-	-	-	-	341	-
		151752	DSP Plainview 138kV UPG	-	-	-	-	-	-	-	-	-	-	-	430
		151759	LGE	-	-	-	-	-	-	-	-	-	-	77	220
		152109	REL-Smyrna 604 Brkr Add	-	-	-	-	-	-	-	-	-	-	-	737
		152123	REL-Harmony Landing Auto	-	-	-	-	-	-	-	-	-	-	-	174
		152221	MC 4532 and 4504-60 TIE Brkr	-	-	-	-	-	-	-	-	-	-	-	647
		152222	BL 345kV 4532-38 TIE Brkr Rpl	-	-	-	-	-	-	-	-	-	-	262	71
		152265	SCADA PRIVATE NTWK_LGE_2016	-	-	-	-	-	-	-	-	-	-	17	-
		152978	Tip Top 6619 Brkr Overhaul	-	-	-	-	-	-	-	-	-	-	17	-
		152980	PR Watterson-Pleasant Grove	-	-	-	-	-	-	-	-	-	-	714	-
	Specific T	otal		7,326	10,067	13,133	21,604	9,918	7,749	14,463	39,844	39,219	12,482	11,205	8,523
LG&E To	otal			9,803	13,120	16,988	24,327	14,482	12,202	21,410	47,008	43,875	20,782	14,799	23,913

Closings to Plant-in service - Base Period ended 2/28/2017 (\$'000s)

	Project	Project Description	Amount
Routine	139688	Test Lab Equipment-2015-LGE	6
	139689	Test Lab Equipment-2016-LGE	63
	140097	EMS OPERATOR MONITORS-LGE-2016	17
	142759	Rplce EMS Wkstations-LGE-2013	5
	146794	Comp-related Equip-LGE-2015	35
	148502	EMS CHNL EXPANSION-LGE-2015	12
	149750	Simpsonville Guard Station-LGE	5
	150096	FUL UPGRD EMS SWARE-LGE-2016	114
	150120	SIMP CIRCUIT UPDATE-LGE-2015	4
	150130	Drafting Printer-LG&E	7
	150467	Comp-related Equip LGE 2016	25
	150735	Waterside West Lighting	12
	151106	LGE Spare Relay Clocks-2016	25
	151896	Danville Drafting Plotter-LGE	4
	152980	PR Watterson-Pleasant Grove	619
	153280	ROR-LGE SPARE CCVT-2016	36
	L5-2013	RELOCATION T-LINES	3
	L5-2015	RELOCATION T-LINES LG&E 2015	7
	L5-2016	RELOCATIONS T-LINES LG&E 2016	52
	L5-2017	Relocations T Lines LGE 2017	8
	L8-2016	STORM DAMAGE T-LINE LGE 2016	148
	L8-2017	Storm Damage T-Line LGE 2017	24
	L9-14	PRIORITY REPL T-LINES LGE 2014	782
	L9-2015	PRIORITY REPL T-LINES LGE 2015	2,635
	L9-2016	PRIORITY REPL T-LINES LGE 2016	871
	L9-2017	Priority Repl T-Lines LGE 2017	193
	LARM-2016	Priority Repl X-Arms LGE 2016	30
		Priority Repl X-Arms LGE 2017	16
	LBR-13	LGE Breakers Replacements-2013	(76
	LBR-14	LG&E Breaker Replacements 2014	149
	LBRFAIL14	LGE-Brkr Fail-2014	50
	LBRFAIL15	LGE-Brkr Fail-2015	99
		LGE-Brkr Fail-2016	294
	LINS-2016	Priority Repl Insltrs LGE 2016	68
		Priority Repl Insltrs LGE 2017	18
		LGE-OtherFail-2014	63
		LGE-OtherFail-2016	117
		Priority Repl Other LGE 2016	183
		Priority Repl Other LGE 2017	25
		LGE-Other-2014	23 71
		LGE-Other-2015	904
	LOTPR14	LG&E Other Prot Blanket 2014	29

Closings to Plant-in service - Base Period ended 2/28/2017 (\$'000s)

	Project	Project Description	Amount
	LOTPR15	LG&E Other Prot Blanket 2015	76
	LOTPR16	LG&E Other Prot Blanket 2016	196
	LOTPRFL16	LG&E Oth Prot Fail 2016	40
	LRELAY-14	Relay Replacements-LG&E-2014	292
	LRELAY-15	Relay Replacements-LG&E-2015	974
	LRELAY-17	Relay Replacements-LG&E-2017	62
	LREL-FL16	LG&E Relay Failures-2016	228
	LRTU-16	LGE RTU Replacements-16	621
	LRTU-FL16	LG&E RTU Failures-2016	26
	LSWT-2015	PRIORITY REPL SWTCHS LGE 2015	14
	LTFFAIL16	LGE-Xfrmr Fail-2016	452
Routine Total			10,735
Specific	118209	Trimble 2 Transmission lge	0
	131314	Lou Upgr-New Albany-Subs	12
	131443	KENZIG ROAD	11,142
	131851	LGE-2016	42
	134406	REPLACE SIMP VIDEO WALL-LGE	230
	134624	New 138kV CR7 SW Yard-Network	167
	139218	New 138kV CR7 SW Yard-Intrcn	(51)
	140017	Dix Upgrade - LGE 2014	(89)
	143866	Trimble County TR6 Cleanup/Rpl	116
	144110	BACKUP CC V_WALL RPLC-LGE-2016	22
	144126	Rpl Mud Lane 6676 & 3877 Brkrs	370
	144127	Rpl South Park 6676 Brkr	(19)
	144130	Rpl (5) Cloverport 138kV Brks	11
	144132	Rpl TC-138kV BUS TIE Brkr	261
	144159	Rpl Seminole Fence	-
	144330	New 69kV Bkr Station MC-CRSW	1,167
	144628	MILL CREEK RELOCATION	573
	144683	TEP-DFR Replace MODs-LGE	229
	145796	Mud Lane TR4 Transformer Rpl	3
	146329	REL 345 ROW WIDENING	1,583
	146686	REL 345 ROW Blue Lck-Mdtwn	1,026
	147118	MC 4503 & 4503-33 TIE Brkrs	1,125
	147308	Lyndon S Potential Xfrmr Rpl	44
	147312	Mill Creek 532 Line CCVT Rpl	92
	147328	PR Trimble Co-Centerfield	1,555
	147330	PR Harmony Landing-Skylight	1,003
	147353	Paddy's Run Bushings	33
	147357	Mud Lane Insulator Rpl	368
	147997	TEP-Rpl TC 345kV Switches	257
	149028	TEP-LGE DFR 2016	275

Closings to Plant-in service - Base Period ended 2/28/2017 (\$'000s)

]	Project	Project Description	Amount
	150082	PR Knob Creek-Tip Top	4
	150254	Algonquin OCB Kit Install	14
	150258	Paddys Run OCB Kit Install	15
	150637	TEP-Middletown Brkr Rpl (3)	511
	150650	PR Middletown-Centerfield	570
	150734	Middletown TR2 Bushing Rpl	45
	150804	OATI Software Change - LGE	21
	151179	Clifty Creek Brkr Compress	30
	151208	Mill Creek 4533 Brk Rpl	784
	151305	Algonquin PT Rpl	27
	151306	Paddys Run PT Rpl	83
	151307	Clay 69kV BUS TIE Bush Rpl	31
	151467	Cane Run SW CT Add	344
	151601	Louisville RFL9300 RPLS	315
	152265	SCADA PRIVATE NTWK_LGE_2016	17
	152978	Tip Top 6619 Brkr Overhaul	16
Specific Total			24,375
Grand Total			35,110

Closings to Plant-in service - Test Period ended 6/30/2018 \$'000s

]	Project	Project Description	Amount
Routine	137570	ROUTINE EMS-LGE 2017	6
	139690	Test Lab Equipment-2017-LGE	9
	140069	DIGITAL EMS COM CHNLS-LGE-2017	34
	140224	FULL UPGRD EMS SWARE-LGE-2018	139
	147755	EMS DBASE EXPANSION-LGE-2017	32
	147787	EMS APP ENHANCEMENTS-LGE-2017	19
	152617	2017 Spare 345 Brk-LGE	400
	152618	LGE Spare 138/69 XTR	1,500
	152620	LGE Spare Misc Equip	340
	L5-2017	Relocations T Lines LGE 2017	25
	L5-2018	Relocations T Lines LGE 2018	24
	L8-2017	Storm Damage T-Line LGE 2017	72
	L8-2018	Storm Damage T-Line LGE 2018	74
	L9-2017	Priority Repl T-Lines LGE 2017	1,148
	L9-2018	Priority Repl T-Lines LGE 2018	2,459
	LARM-2017	Priority Repl X-Arms LGE 2017	93
	LARREST17	LGE Arrester Replacements 2017	202
	LBRFAIL17	LGE-Brkr Fail-2017	225
	LINS-2017	Priority Repl Insltrs LGE 2017	109
	LINS-2018	Priority Repl Insltrs LGE 2018	81
	LOTFAIL17	LGE-OtherFail-2017	225
	LOTH-2017	Priority Repl Other LGE 2017	75
	LOTH-2018	Priority Repl Other LGE 2018	75
	LOTPR17	LG&E Other Prot Blanket 2017	0
	LOTPR18	LG&E Other Prot Blanket 2018	14
	LOTPRFL17	LG&E Oth Prot Fail 2017	6
	LRELAY-17	Relay Replacements-LG&E-2017	108
	LREL-FL17	LG&E Relay Failures-2017	68
	LRTU-17	LGE RTU Replacements-17	855
	LRTU-18	LGE RTU Replacements-18	885
	LRTU-FL17	LG&E RTU Failures-2017	3
	LTFFAIL17	LGE-Xfrmr Fail-2017	1,500
	LTFFAIL18	LGE-Xfrmr Fail-2018	1,301
Routine Total			12,106
Specific	131852	LGE-2017	323
	134204	DSP MT WSHNGTN SUB	345
	137763	RIVER RD HWY RELO	1,342
	146709	OUTERLOOP LANDFILL RELO	(37)
	148988	Blue Lick DFR	140
	149679	Middletown	2,500
	151752	DSP Plainview 138kV UPG	430
	152221	MC 4532 and 4504-60 TIE Brkr	647

Closings to Plant-in service - Test Period ended 6/30/2018 \$'000s

	Project	Project Description	Amount
Specific	152222	BL 345kV 4532-38 TIE Brkr Rpl	550
Specific Tota	al		6,240
Grand Total	l		18,346

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 48

Responding Witness: David S. Sinclair / William S. Seelye / John P. Malloy / Robert M. Conroy / Counsel

- Q.1-48. Referring to the proposed Curtailable Service Rider:
 - a. Please provide in native format all workpapers, studies, analyses, and documents (all Excel worksheets with working formulas and intact links) supporting and/or underlying the development of the proposed rider.
 - b. Provide all studies and/or analyses that LG&E conducted concerning expected customer acceptance of and willingness to receive service under the proposed rider.
 - c. Identify and provide all documents provided to and correspondence with existing interruptible customers related to the development, implementation, and operation of the proposed CSR rider.
 - d. Provide all documents relating to any customer comments and/or feedback that LG&E received regarding the proposed reductions in rate credits under the CSR rider prior to LG&E's deciding to include the reduced credits in the proposed CSR rider.
 - e. Identify and provide all alternative rate credits for the CSR rider that LG&E considered but rejected, and describe in detail the reasons for rejecting the considered alternative(s).

A.1-48.

- a. See attached. Responsive documents subject to attorney-client privilege or attorney work product protection are not being produced, and are noted in the Company's privilege log being filed in this proceeding. Also see the response to PSC 1-54.
- b. The Company performed no surveys, analysis or studies concerning expected customer acceptance of or willingness to receive service under the proposed rider.

c. Beginning November 1, 2016 and thereafter, following the press release issued by the Company of a rate adjustment filing, Major Accounts Representatives communicated by email and/or telephone to inform their assigned customers of the filing. This proactive outreach is part of the role these employees serve with the company's key and largest customers. Then on November 16, 2016 and thereafter, the Major Accounts Representatives communicated with customers that the proposed rates had been filed. Numerous communications between Major Accounts Representatives and their assigned customers have occurred since then and continue to occur. If requested by the customer, in-person meetings are being scheduled to discuss the proposed changes and spreadsheets forecasting the calculations of the proposed rates are being provided. Attached is a template email document used to communicate with customers including those served under the Curtailable Service Rider.

Across the Companies, two customers being served under Curtailable Service Rider requested and were provided a rate comparison used during an in-person meeting to discuss the proposed rates. Those rate comparisons are being provided with all customer-identifying information replaced with generic identifiers.

- d. There are no such documents.
- e. See the Company's objection filed on January 20, 2017.

Sebourn, Michael

From:	Sauer, Bruce
Sent:	Tuesday, October 11, 2016 4:25 PM
То:	Sebourn, Michael
Subject:	Comparison of Henry Hub, TGT Mainline, and Dominion South gas prices
Attachments:	Comparison of Henry Hub_TGT_Mainline_Dominion_South_Gas_Prices_10_11_16 _MSebourn.xlsx

Mike,

The attached workbook summarizes the comparison between Henry Hub, TGT Mainline, and Dominion South daily average prices. There is relatively little difference between Henry Hub and TGT Mainline, with TGT Mainline averaging \$0.07/mmBtu lower than Henry Hub. Dominion South is considerably weaker, averaging \$1.06/mmBtu lower than the Henry Hub. I've asked PIRA for an explanation.

For the last 12 months, the average prices are as follows:

Henry Hub	\$2.25/mmBtu
TGT Mainline	\$2.18/mmBtu
Dominion South	\$1.29/mmBtu

Bruce

Attachment 2 is being provided in a separate file in Excel format.

Rate Case to be Submitted Initial Communication

Good morning.

As you may have seen or heard earlier this morning, Kentucky Utilities Company and Louisville Gas and Electric Company announced today that they are investing \$2.2 billion in their electric and natural gas system to improve safety, reduce outage times and enhance service to customers. To recover some of the costs associated with these investments, Kentucky Utilities and Louisville Gas and Electric plan to request approval from the Kentucky Public Service Commission to adjust customer rates accordingly.

A press release was made this morning at 7am, and I have attached it for your reference. You will see there is some mention of the cost increases for the residential rate class. At this time, I do not have the respective information on the increases for Commercial or Industrial customer classes.

Next steps

As the filings are made public they will be posted to our website (<u>https://lge-ku.com/our-company/regulatory</u>), and I plan to forward you a copy at that time. I would be happy to meet with you and your management team in November and December to discuss the specific impacts to your business operations. The filing will request that the rate adjustments be effective in July 2017.

Please discuss this information within your organization and let me know if you have any questions or concerns.

Thanks,

Rate Case to be Submitted Follow-up Communication

Kentucky Utilities Company and Louisville Gas and Electric Company published paperwork with the Kentucky Public Service Commission for base rate adjustments. They are KPSC case numbers 2016-00370 and 2016-00371, respectively.

Additionally, the following legal notices will begin appearing in customer's bills and various newspapers around the state:

<u>KU Current and Proposed Electric Rates</u> <u>LG&E Current and Proposed Electric & Gas Rates</u>

In these links you will find the proposed rate changes. Because every commercial and industrial customer has a different load factor, the impact to your facility will vary. The filing will request that the rate adjustments be effective in July 2017.

I would be happy to meet with you and look at a "side by side" comparison of current and proposed rates based upon the historical usage of your facility. Furthermore, if you have any questions or concerns about the proposed increases, please give me a call.

In the meantime, I hope you have a happy thanksgiving with your friends and family.

Kind regards,

LG&E RTS Comparison of Current and Proposed Rates

		Existing Tariff		Proposed Tariff	
CA: XXXXX	XXX	Basic Service Charge: \$	1,000	Basic Service Charge: \$	1,400
Customer Name: Custon	mer 1	Energy Charge: \$	0.03711 /kWh	Energy Charge: \$	0.03711 /kWh
Service Address: 138kV	Service	Peak Demand Charge: \$	4.85 /kVA	Peak Demand Charge: \$	6.98 /kVA
		Interm. Demand Charge: \$	3.30 /kVA	Interm. Demand Charge: \$	5.12 /kVA
Contract Capacity:	46,000 kVA	Base Demand Charge: \$	3.05 /kVA	Base Demand Charge: \$	1.52 /kVA
CSR Firm:	4,500 kVA	CSR Credit: \$	(6.40) /kVA	CSR Credit: \$	(3.56) /kVA

	24 Month Hi	storical Informa	ation						Exis	sting Rates							Prop	posed Rate	s		
Test Month Bill Date	Energy kWH	Measured On Peak kVA Demand	Measured Interm. kVA Demand	Measured Base kVA Demand	-	ustomer Charge	En	ergy Charge	Deman	d Charge	CSR	Credit	Total	Customer Charge	En	ergy Charge	Demar	nd Charge	С	SR Credit	Total
11/29/2016	20,866,200			39,457.90	\$	1,000		774,345		441,928		223,731)	\$ 993,543	\$ 1,400	\$	774,345		J	\$	(124,450)	\$ 1,198,655
10/27/2016	22,695,658			37,574.50	\$	1,000	\$	842,236				211,677)	1,052,393	\$ 1,400	\$	842,236		524,571		(117,745)	1,250,462
09/28/2016	10,167,500			30,283.90	\$	1,000	\$	377,316	\$	352,039	\$ (165,017)	\$ 565,338	\$ 1,400	\$	377,316	\$	436,355	\$	(91,791)	\$ 723,280
08/30/2016	19,653,427	29,916.20	30,118.00	31,046.20	\$	1,000	\$	729,339	\$	349,708	\$ (163,955)	\$ 916,091	\$ 1,400	\$	729,339	\$	432,939	\$	(91,200)	\$ 1,072,478
07/28/2016	19,701,487	30,145.20	30,297.90	30,693.30	\$	1,000	\$	731,122	\$	351,412	\$ (165,107)	\$ 918,428	\$ 1,400	\$	731,122	\$	435,459	\$	(91,841)	\$ 1,076,140
06/29/2016	19,121,954	30,257.00	30,257.00	30,344.00	\$	1,000	\$	709,616	\$	351,820	\$ (164,845)	\$ 897,590	\$ 1,400	\$	709,616	\$	436,030	\$	(91,695)	\$ 1,055,350
05/27/2016	20,231,205	29,911.80	30,132.70	30,759.60	\$	1,000	\$	750,780	\$	349,735	\$ (164,049)	\$ 937,466	\$ 1,400	\$	750,780	\$	432,984	\$	(91,252)	\$ 1,093,911
04/28/2016	19,894,530	32,525.80	33,303.40	33,935.40	\$	1,000	\$	738,286	\$	372,876	\$ (184,342)	\$ 927,821	\$ 1,400	\$	738,286	\$	467,463	\$	(102,540)	\$ 1,104,609
03/30/2016	23,418,925	37,498.80	37,498.80	37,498.80	\$	1,000	\$	869,076	\$	419,987	\$ (211,192)	\$ 1,078,871	\$ 1,400	\$	869,076	\$	523,655	\$	(117,476)	\$ 1,276,656
02/29/2016	19,315,577	33,520.80	33,879.60	34,198.10	\$	1,000	\$	716,801	\$	379,604	\$ (188,029)	\$ 909,375	\$ 1,400	\$	716,801	\$	477,359	\$	(104,591)	\$ 1,090,968
01/29/2016	17,920,385	30,421.80	31,006.60	31,079.60	\$	1,000	\$	665,025	\$	364,212	\$ (169,642)	\$ 860,595	\$ 1,400	\$	665,025	\$	447,078	\$	(94,363)	\$ 1,019,140
12/30/2015	17,342,125	30,586.80	31,197.30	31,197.30	\$	1,000	\$	643,566	\$	365,641	\$ (170,863)	\$ 839,345	\$ 1,400	\$	643,566	\$	449,206	\$	(95,042)	\$ 999,130
11/30/2015	17,293,286	32,056.10	32,056.10	32,056.10									\$ 10,896,856								\$ 12,960,781
10/28/2015	23,563,889	38,390.90	38,390.90	38,390.90																Change:	\$ 2,063,925
09/29/2015	20,333,344	38,030.50	38,030.50	38,070.30																	18.9%
08/28/2015	17,870,039	30,456.90	30,456.90	30,694.80																	
07/28/2015	14,837,000	30,550.80	30,694.80	30,694.80																	
06/29/2015	19,702,763	33,361.30	34,833.60	34,833.60																	

05/28/2015

04/29/2015

03/30/2015

02/27/2015

01/29/2015

12/30/2014

40,645.60

42,030.70

40,141.30

46,192.60

40,222.30

40,167.40

23,808,903

23,519,560

25,060,943

25,449,855

24,244,068

22,798,615

40,645.60

42,659.60

40,141.30

46,192.60

40,512.90

40,472.70

42,453.10

42,744.50

40,141.30

49,986.60

46,175.80

40,472.70

LG&E RTS Comparison of Current and Proposed Rates

		Existing Tariff		Proposed Tariff
CA: XX	XXXXX	Basic Service Charge: \$	1,000	Basic Service Charge: \$ 1,400
Customer Name: Cu	stomer 1	Energy Charge: \$	0.03711 /kWh	Energy Charge: \$ 0.03711 /kWh
Service Address: 138	8kV Service	Peak Demand Charge: \$	4.85 /kVA	Peak Demand Charge: \$ 6.98 /kVA
		Interm. Demand Charge: \$	3.30 /kVA	Interm. Demand Charge: \$ 5.12 /kVA
Contract Capacity:	46,000 kVA	Base Demand Charge: \$	3.05 /kVA	Base Demand Charge: \$ 1.52 /kVA
CSR Firm:	4,500 kVA	CSR Credit: \$	- /kVA	CSR Credit: \$ - /kVA

	24 Month Hi	storical Informa	ation		Existing Rates								Proposed Rates										
Test Month Bill Date	Eneray kWH	Measured On Peak kVA Demand	Measured Interm. kVA Demand	Measured Base kVA Demand		ustomer Charge	Ener	gy Charge	Deman	d Charge	CSR Credi		Total	-	Customer Charge	Energ	y Charge	Demand Cha	rae	CSR Credit		1	Total
11/29/2016	. 57				¢	1,000	¢	774,345		441,928	•	\$	1,217,273	¢	1.400	¢	774,345		3	\$	\$		1,323,105
10/27/2016	20,866,200 22,695,658	39,457.90 37,574.50	39,457.90 37,574.50	39,457.90 37,574.50	ф Ф		ф \$	842,236		441,928	φ •	φ \$	1,264,070	¢	1,400	¢	842,236	\$ 524		\$ - \$ -	9 9		1,368,207
09/28/2016	10,167,500	30,283.90	30,283.90	30,283.90	¢		э \$	377,316		352,039	φ •	φ \$	730,355	\$	1,400	9	377,316				9		815,071
08/30/2016	19,653,427	29,916.20	30,283.90	30,283.90	¢		\$	729,339		349,708	ф Ф	φ \$	1,080,047	φ		\$	729,339	\$ 432		¢ -	Ψ		1,163,678
07/28/2016	19,653,427	30,145.20		30,693.30	¢		э \$	731,122			\$ \$	φ \$	1,083,534	\$	1,400	9	729,339				9		1,167,981
06/29/2016	19,121,954	30,145.20	30,297.90	30,344.00	¢		\$	709,616		351,820	÷	φ \$	1,062,435	¢	,	φ \$	709,616			- د	\$		1,147,045
05/27/2016	20,231,205	29,911.80	30,132.70	30,344.00	\$		\$	750,780			\$	\$	1,101,515	¢ ¢	1,400	¢ ¢	750,780			\$ -	φ \$		1,185,164
04/28/2016	19,894,530	32,525.80	33,303.40	33,935.40	¢		\$	738,286			÷	\$	1,112,162	¢	,	\$	738,286			\$ -	\$		1,207,150
03/30/2016	23,418,925	37,498.80	37,498.80	37,498.80	\$	1,000	\$	869,076			÷	\$	1,290,063	\$	1,400	\$	869,076			\$ -	¢ \$		1,394,132
02/29/2016	19,315,577	33,520.80	33,879.60	34,198.10	\$	1	\$	716,801	\$ \$		÷	\$	1,097,405	\$	1,400	\$	716,801	\$ 477		\$ -	\$		1,195,560
01/29/2016	17,920,385	30,421.80	31,006.60	31,079.60	\$		\$	665,025	\$		÷	\$	1,030,237	\$	1,400	\$	665,025	\$ 447		\$ -	\$		1,113,503
12/30/2015	17,342,125	30,586.80	31,197.30	31,197.30	\$		\$	643,566			÷	\$	1,010,208	\$	1,400	\$	643,566			\$ -	\$		1,094,172
11/30/2015	17,293,286	32,056.10		32,056.10	Ŧ	.,	Ŧ	,	Ŧ		•	\$	13,079,305	Ŧ	.,	Ŧ	,	• • • • •		+	\$	1	4,174,768
10/28/2015	23,563,889	38,390.90	38,390.90	38,390.90								Ŧ								Chang	e: \$		1,095,463
09/29/2015	20,333,344	38,030.50	38,030.50	38,070.30																			8.4%
08/28/2015	17,870,039	30,456.90	30,456.90	30,694.80																			
07/28/2015	14,837,000	30,550.80	30,694.80	30,694.80																			
06/29/2015	19,702,763	33,361.30	34,833.60	34,833.60																			
05/28/2015	23,808,903	40,645.60	40,645.60	42,453.10																			

23,519,560

25,060,943

25,449,855

24,244,068

22,798,615

04/29/2015

03/30/2015

02/27/2015

01/29/2015

12/30/2014

42,030.70

40,141.30

46,192.60

40,222.30

40,167.40

42,659.60

40,141.30

46,192.60

40,512.90

40,472.70

42,744.50

40,141.30

49,986.60

46,175.80

40,472.70

KU TODP Comparison of Current and Proposed Rates

CA:	XXXXXX
Customer Name:	Customer 2
Service Address:	XXXXXXX

Contract Capacity:	10,722 kVA
CSR Firm:	4,000 kVA

Test Month

Existing Tariff	
Basic Service Charge:	\$ 300
Energy Charge:	\$ 0.03432 /kWh
Peak Demand Charge:	\$ 5.89 /kVA
Interm. Demand Charge:	\$ 4.39 /kVA
Base Demand Charge:	\$ 3.34 /kVA
CSR Credit:	\$ (6.50) /kVA

Proposed Tariff		
Basic Service Charge:	\$ 330	
Energy Charge:	\$ 0.03433	/kWh
Peak Demand Charge:	\$ 6.83	/kVA
Interm. Demand Charge:	\$ 5.34	/kVA
Base Demand Charge:	2.92	/kVA
CSR Credit:	\$ (3.67)	/kVA

	storical Informa							Existing Rates			Proposed Rates									
	Measured On	weasured	Measureu		Questioner							0								
	Peak kVA	Interm. kVA	Base kVA		Customer								tomer							
Energy kWH	Demand	Demand	Demand		Charge	Energy Charge	Den	mand Charge	CSR Credit	Total		Ch	arge	Energy Charge	Demai	nd Charge	CS	R Credit		Total
5,092,800	10,014.60	10,025.80	10,025.80	\$	300	\$ 174,785	\$	136,485	\$ (39,168)	\$ 272,403	1 [\$	330	\$ 174,836	\$	154,558	\$	(22,115)	\$	307,609
5,721,600	11,171.40	11,171.40	11,171.40	\$	300	\$ 196,365	\$	152,154	\$ (46,614)	\$ 302,206		\$	330	\$ 196,423	\$	168,576	\$	(26,319)	\$	339,010
5,596,800	10,643.00	10,643.00	10,643.00	\$	300	\$ 192,082	\$	144,958	\$ (43,180)	\$ 294,160		\$	330	\$ 192,138	\$	160,834	\$	(24,380)	\$	328,922
5,798,400	10,483.40	10,483.40	10,483.40	\$	300	\$ 199,001	\$	142,784	\$ (42,142)	\$ 299,943		\$	330	\$ 199,059	\$	158,891	\$	(23,794)	\$	334,486
6,110,400	10,471.00	10,705.30	10,705.30	\$	300	\$ 209,709	\$	144,426	\$ (43,584)	\$ 310,851		\$	330	\$ 209,770	\$	159,991	\$	(24,608)	\$	345,483
4,435,200	9,876.60	9,898.60	9,984.40	\$	300	\$ 152,216	\$	134,976	\$ (38,341)	249,151		\$	330	\$ 152,260	\$	151,624	\$	(21,648)		282,566
5,198,400	9,372.90	9,419.00	9,609.60	\$	300	\$ 178,409		128,652	\$ (35,224)	\$ 272,137		\$		\$ 178,461	\$	145,623		(19,888)		304,526
4,752,000	8,816.50	8,964.60	8,964.60	\$	300	\$ 163,089	\$	121,226	\$ (32,270)	252,344		\$		\$ 163,136	\$	139,396		(18,220)		284,642
5,347,200	10,256.90	10,337.40	10,337.40	\$	300	\$ 183,516	\$	140,321	\$ (41,193)	282,944		\$	330	\$ 183,569	\$	156,565		(23,258)		317,206
5,059,200	10,091.70	10,091.70	10,091.70	\$	300	\$ 173,632	\$	137,449	\$ (39,596)	271,785		\$		\$ 173,682	\$	154,124	\$	(22,357)		305,780
5,078,400	9,899.40	10,099.30	10,259.10	\$	300	\$ 174,291	\$	136,909	\$ (39,645)	271,854		\$	330	\$ 174,341	\$	152,851	\$	(22,384)	\$	305,138
5,424,000	9,551.20	10,059.90	10,059.90	\$	300	\$ 186,152	\$	134,020	\$ (39,389)	\$ 281,082		\$	330	\$ 186,206	\$	150,263	\$	(22,240)	\$	314,559
5,361,600	9,649.60	9,649.60	9,906.80	_						\$ 3,360,860									\$	3,769,928
5,203,200	10,377.40	10,469.50	10,533.50								-							Change:	\$	409,068
5,318,400	10,461.10	10,555.10	10,704.60																	12.2%

Bill Date	Energy kWH	Demand	Demand	Demand
12/21/2016	5,092,800	10,014.60	10,025.80	10,025.80
11/21/2016	5,721,600	11,171.40	11,171.40	11,171.40
10/21/2016	5,596,800	10,643.00	10,643.00	10,643.00
09/22/2016	5,798,400	10,483.40	10,483.40	10,483.40
08/23/2016	6,110,400	10,471.00	10,705.30	10,705.30
07/22/2016	4,435,200	9,876.60	9,898.60	9,984.40
06/22/2016	5,198,400	9,372.90	9,419.00	9,609.60
05/20/2016	4,752,000	8,816.50	8,964.60	8,964.60
04/21/2016	5,347,200	10,256.90	10,337.40	10,337.40
03/22/2016	5,059,200	10,091.70	10,091.70	10,091.70
02/23/2016	5,078,400	9,899.40	10,099.30	10,259.10
01/25/2016	5,424,000	9,551.20	10,059.90	10,059.90
12/22/2015	5,361,600	9,649.60	9,649.60	9,906.80
11/20/2015	5,203,200	10,377.40	10,469.50	10,533.50
10/22/2015	5,318,400	10,461.10	10,555.10	10,704.60
09/23/2015	6,028,800	10,678.60	10,678.60	10,678.60
08/21/2015	6,326,400	10,336.60	10,336.60	10,683.90
07/22/2015	4,833,600	9,848.70	9,873.80	9,873.80
06/23/2015	5,784,000	9,747.90	9,780.60	9,780.60
05/21/2015	4,848,000	9,395.60	9,455.70	9,575.80
04/23/2015	5,668,800	9,934.20	9,934.20	10,049.50
03/24/2015	5,179,200	9,786.10	9,805.40	9,805.40
02/23/2015	5,462,400	9,834.20	9,834.20	9,834.20
01/23/2015	5,212,800	9,522.00	9,881.30	9,881.30

KU TODP Comparison of Current and Proposed Rates

CA:	XXXXXX
Customer Name:	Customer 2
Service Address:	XXXXXXX

Contract Capacity:	10,722	kVA
CSR Firm:	4,000	kVA

24 Month Historical Information										
		weasured On	weasured	weasureu						
Test Month		Peak kVA	Interm. kVA	Base kVA						
Bill Date	Energy kWH	Demand	Demand	Demand						
12/21/2016	5,092,800	10,014.60	10,025.80	10,025.80						
11/21/2016	5,721,600	11,171.40	11,171.40	11,171.40						
10/21/2016	5,596,800	10,643.00	10,643.00	10,643.00						
09/22/2016	5,798,400	10,483.40	10,483.40	10,483.40						
08/23/2016	6,110,400	10,471.00	10,705.30	10,705.30						
07/22/2016	4,435,200	9,876.60	9,898.60	9,984.40						
06/22/2016	5,198,400	9,372.90	9,419.00	9,609.60						
05/20/2016	4,752,000	8,816.50	8,964.60	8,964.60						
04/21/2016	5,347,200	10,256.90	10,337.40	10,337.40						
03/22/2016	5,059,200	10,091.70	10,091.70	10,091.70						
02/23/2016	5,078,400	9,899.40	10,099.30	10,259.10						
01/25/2016	5,424,000	9,551.20	10,059.90	10,059.90						
12/22/2015	5,361,600	9,649.60	9,649.60	9,906.80						
11/20/2015	5,203,200	10,377.40	10,469.50	10,533.50						
10/22/2015	5,318,400	10,461.10	10,555.10	10,704.60						
09/23/2015	6,028,800	10,678.60	10,678.60	10,678.60						
08/21/2015	6,326,400	10,336.60	10,336.60	10,683.90						
07/22/2015	4,833,600	9,848.70	9,873.80	9,873.80						
06/23/2015	5,784,000	9,747.90	9,780.60	9,780.60						
05/21/2015	4,848,000	9,395.60	9,455.70	9,575.80						
04/23/2015	5,668,800	9,934.20	9,934.20	10,049.50						
03/24/2015	5,179,200	9,786.10	9,805.40	9,805.40						
02/23/2015	5,462,400	9,834.20	9,834.20	9,834.20						
01/23/2015	5,212,800	9,522.00	9,881.30	9,881.30						

\$ 300	
\$ 0.03432	/kWh
\$ 5.89	/kVA
\$ 4.39	/kVA
\$ 3.34	/kVA
\$ -	/kVA
\$ \$ \$	\$ 0.03432 \$ 5.89 \$ 4.39 \$ 3.34

Proposed Tariff		
Basic Service Charge:	\$ 330	
Energy Charge:	\$ 0.03433	/kWh
Peak Demand Charge:	\$ 6.83	/kVA
Interm. Demand Charge:	\$ 5.34	/kVA
Base Demand Charge:	\$ 2.92	/kVA
CSR Credit:	\$ -	/kVA

			Proposed Rates													
	tomer arge	Energy Charge	Demand Charge	CSR	Credit		Total		ustomer Charge	En	ergy Charge	Demand Charge	CS	SR Credit		Total
	\$ 300	\$ 174,785	\$ 136,485	\$	-	\$	311,570	\$	330	\$	174,836	\$ 154,558	\$	-	\$	329,724
LE	\$ 300	\$ 196,365	\$ 152,154	\$	-	\$	348,820	\$	330	\$	196,423	\$ 168,576	\$	-	\$	365,329
	\$ 300	\$ 192,082	\$ 144,958	\$	-	\$	337,340	\$	330	\$	192,138	\$ 160,834	\$	-	\$	353,302
ΙĒ	\$ 300	\$ 199,001	\$ 142,784	\$	-	\$	342,085	\$	330	\$	199,059	\$ 158,891	\$	-	\$	358,280
ΙĒ	\$ 300	\$ 209,709	\$ 144,426	\$	-	\$	354,435	\$	330	\$	209,770	\$ 159,991	\$	-	\$	370,092
ΙĒ	\$ 300	\$ 152,216	\$ 134,976	\$	-	\$	287,492	\$	330	\$	152,260	\$ 151,624	\$	-	\$	304,214
ΙĒ	\$ 300	\$ 178,409	\$ 128,652	\$	-	\$	307,361	\$	330	\$	178,461	\$ 145,623	\$	-	\$	324,414
ΙĒ	\$ 300	\$ 163,089	\$ 121,226	\$	-	\$	284,614	\$	330	\$	163,136	\$ 139,396	\$	-	\$	302,862
	\$ 300	\$ 183,516	\$ 140,321	\$	-	\$	324,137	\$	330	\$	183,569	\$ 156,565	\$	-	\$	340,464
	\$ 300	\$ 173,632	\$ 137,449	\$	-	\$	311,381	\$	330	\$	173,682	\$ 154,124	\$	-	\$	328,137
ΙĒ	\$ 300	\$ 174,291	\$ 136,909	\$	-	\$	311,499	\$	330	\$	174,341	\$ 152,851	\$	-	\$	327,523
ΙĒ	\$ 300	\$ 186,152	\$ 134,020	\$	-	\$	320,471	\$	330	\$	186,206	\$ 150,263	\$	-	\$	336,799
						\$	3,841,206								\$	4,041,138
														Change:	S	199 933

Change: \$ 199,933

5.2%

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 49

Responding Witness: William S. Seelye / David S. Sinclair

- Q.1-49. Identify and provide all workpapers, studies, analyses, and documents related to any analyses conducted by or on behalf of LG&E concerning the potential customer-specific and service-area economic impacts of reducing the existing CSR credits.
- A.1-49. There are no workpapers, studies, analyses, and documents related to any analyses conducted by or on behalf of LG&E concerning the potential customer-specific and service-area economic impacts of reducing the existing CSR credits.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 50

Responding Witness: Christopher M. Garrett

- Q.1-50. For each existing CSR customer (identified only by reference number), please provide the estimated annual dollar impact of LG&E's proposed reductions in the CSR credit. Provide all workpapers supporting the estimated annual dollar impacts.
- A.1-50. No such estimate was made. The Company does not forecast the annual dollar impact of the proposed reductions in the CSR credit by customer; therefore, the requested information is not available. Refer to Tab 66 of the Filing Requirements for present and proposed rates.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 51

Responding Witness: David S. Sinclair

Q.1-51. Referring to existing Rider CSR:

- a. For each customer (identified only by reference number) served under the rider, identify the total MW of curtailable/interruptible load under contract. Please indicate if the requested information is the same as information provided in the direct testimony of witness David S. Sinclair at 24: Table 6. This instruction applies to each subpart of this request.
- b. State the number of months in which each customer in subpart (a) above has been continuously served under the existing rider or its predecessor.
- c. For each customer identified in the subpart (a) above, provide the customer's firm contract demand if applicable under Option A.
- d. For each customer identified in the subpart (a) above, provide the customer's Designated Curtailable Load if applicable under Option B.

A.1-51.

- a. See attached. Customer 3 is the new customer from the note in the testimony of David S. Sinclair at 24, Table 6.
- b. See the response to part a.
- c. See the response to part a.
- d. See the response to part a.

Utility	Company	CSR Date	Units		•		Continuous Months Served
LE	1	14-Jul	kVA	46,000	4,500	41,500	30
LE	2	10-Jul	kVA	30,000	6,000	24,000	78
LE	3	16-Aug	kVA	14,000	9,000	5,000	5

Attachment to Response to KIUC-1 Question No. 51 Page 1 of 1 Sinclair

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 52

Responding Witness: David S. Sinclair

- Q.1-52. Referring to existing Rider CSR and its predecessors:
 - a. For each customer (identified only by reference number) served under the rider, identify the date, time, and duration of each curtailment called by LG&E in the past 60 months?
 - b. For each curtailment referenced in the response to subpart (a) above, specify whether the curtailment was a system reliability event or a buy-through event, identify the MW of load curtailment requested, and identify the MW of load that failed to comply with the curtailment request.
 - c. For each buy-through curtailment identified in the response to subpart (b) above, specify whether the customer bought through the curtailment, the amount of buy-through energy purchased, the price paid for such buy-through energy, and the source (system supply or market) of the buy-through price.
- A.1-52. a. CSR Curtailments 01/01/2012 through 01/13/2017:

Customer	Start Date/Time	End Date/Time	Hours	Туре	Contract/CSR Firm	Load Not	
					or CSR Reduction	Compliant (kVA)	
1	01/06/2014 18:31	01/06/2014 19:42	1.18	Physical Curtailment	36,000 kVA demand;	978	
					3,500 kW firm		
1	01/07/2014 07:14	01/07/2014 10:00	2.77	Physical Curtailment	36,000 kVA demand;	64	
					3,500 kW firm		

- b. See the response to part a.
- c. No curtailments were buy-through curtailments.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 53

Responding Witness: David S. Sinclair

- Q.1-53. Please provide a timeline for the last 10 years showing by year each curtailable/interruptible rate or rider offered by LG&E, the number of customers served under each rate/rider, and the total MW of interruptible or curtailable load served under each curtailable/interruptible rate/rider.
- A.1-53. See attached.

Attachment to Response to KIUC-1 Question No. 53 Page 1 of 1

Sinclair

				CSI	R Offer	ed				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CSR1	Х	Х	х							
CSR2	х	Х	х							
CSR3	Х	х	х							
CSR10				х	х	х	х	х		
CSR30				х	х	х	х	х		
CSR									х	х
		Custo	mers o	n each	rider					
	2010	2011	2012	2013	2014	2015	2016			
CSR10	1	1	2	1	1					
CSR30	1	1	1	1	1					

CSR 2 3

Maximum Curtailable(MW)

	2010	2011	2012	2013	2014	2015	2016
CSR10	25.0	25.0	25.0	22.7	26.0		
CSR30			32.5	32.5	41.5		
CSR						65.5	70.5

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 54

Responding Witness: David S. Sinclair / John P. Malloy

- Q.1-54. Please identify all reports, studies, and/or analyses conducted by on behalf of LG&E or its parent company in the past 5 years related in total or in part to retail interruptible or curtailable electric service in Kentucky.
- A.1-54. Each year, the Companies estimate the hourly integrated load reduction associated with curtailable customers that are treated as a capacity resource. The table below shows forecasted curtailable capacity for both LG&E and KU in MW by year, up to the current year, from the previous ten business plans.

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Plan									
2008	121									
2009	121	93								
2010	121	93	93							
2011	121	93	93	93						
2012	121	93	93	93	93					
2013	121	93	93	93	98	119				
2014	121	93	93	93	100	122	122			
2015	121	93	93	93	102	125	125	133		
2016	121	93	93	93	102	125	125	133	136	
2017	121	93	93	93	102	125	125	133	136	130

Hourly Integrated Curtailable Capacity

Also, see the Companies' Industrial DSM Potential Assessment filed with the Commission in Case No. 2014-00003, particularly the section concerning load control beginning at page 59. The assessment is available at: http://psc.ky.gov/pscecf/2014-00003/rick.lovekamp@lge-ku.com/05262016071923/Closed/LGE_KU_Ind_DSM_Potential_Study_2014-00003_05-26-16.pdf

Response to Question No. 55 Page 1 of 2 Sinclair

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 55

Responding Witness: David S. Sinclair

- Q.1-55. Please explain in detail how LG&E (acting alone or in conjunction with affiliates) treats interruptible/curtailable load in:
 - a. Developing its long-run load forecast.
 - b. Determining its long-run need for future supply-side resources.
 - c. Determining its need for operating reserve capacity.
 - d. Providing ancillary services.
 - e. Determining whether such load qualifies as spinning reserve.
- A.1-55.
- a. The Company considers interruptible/curtailable load as a capacity resource.
- b. See response to (a). The Company considers CSR as a capacity resource available to meet planning reserve margin requirements in resource planning decisions. CSR capacity is assumed to remain at the current level through the analysis period.
- c. CSR capacity does not affect operating reserves, which consist of spinning reserves and non-spinning (supplemental) reserves. Both spinning and supplemental reserves must be available to serve load within a 15 minute period. For curtailable load to qualify as operating reserves, the curtailable load must be fully removable from system load within a 15 minute period. The execution of a CSR event requires a 60 minute notice. Therefore, CSR does not qualify as an operating reserve and is not considered when determining the need for operating reserve capacity.
- d. As noted in part c., CSR capacity cannot be used for spinning and supplemental operating reserves. Similar limitations also exist for

considering CSR capacity for contingency and regulating reserves. Contingency reserves must be available within 15 minutes and regulating reserves must be immediately reactive to Automatic Generation Control to provide normal regulating margin.

e. See the response to part c.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 56

Responding Witness: Robert M. Conroy

- Q.1-56. Given existing laws and regulations in Kentucky, please identify and describe in detail each non-LG&E market option and/or mechanism under which an existing CSR customer could have its curtailable load served.
- A.1-56. LG&E is not aware of any such market option or mechanism.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 57

Responding Witness: Robert M. Conroy

- Q.1-57. Given existing laws and regulations in Kentucky, please identify and describe in detail each non-LG&E market option and/or mechanism through which an existing CSR customer could sell its interruptible load as a demand response resource.
- A.1-57. LG&E is not aware of any such market option or mechanism.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 58

Responding Witness: Christopher M. Garrett

- Q.1-58. Please explain in detail how LG&E treats curtailment buy-though revenues in setting base rates and/or modifying its Fuel Adjustment Clause.
- A.1-58. The last time LG&E had curtailment buy-through revenues was in September 2011 and there are no curtailment buy-through revenues included in this case. If a curtailment buy-through would occur, the buy-through revenues (fuel cost) would be deducted from the power purchase fuel cost for the month in the Fuel Adjustment Clause calculation.

Total FAC recoverable fuel cost = generation fuel + (power purchase fuel – curtailment buy-through revenues/fuel) – off system sales fuel.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 59

Responding Witness: William S. Seelye

- Q.1-59. Please identify and explain in detail how LG&E treats test-year curtailment buy-though revenues in the electric cost-of-service study filed in this case. This request refers to the methodology that LG&E would use even if it received no test-year CSR buy-through revenue.
- A.1-59. There are no buy-through revenues included in the test-year.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 60

Responding Witness: William S. Seelye

- Q.1-60. Please identify and explain in detail how LG&E treats test-year curtailment credits paid to CSR customers in the electric cost-of-service study filed in this case. This request refers to the methodology used by LG&E, and not to any specific amount of test-year CSR credits.
- A.1-60. CSR credits are treated as miscellaneous credits. In the cost of service study, as with other miscellaneous revenues and credits, CSR credits are allocated to all customer classes.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 61

Responding Witness: David S. Sinclair

- Q.1-61. Please identify and explain in detail all situations other than a system reliability event in which LG&E would need or want to physically curtail load under the CSR rider.
- A.1-61. With no restriction requiring all generating units to be committed prior to curtailing load under the CSR rider, the CSR reduction would be used as an economic resource to save fuel costs up to the amount of hours specified in the tariff.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 62

Responding Witness: David S. Sinclair

- Q.1-62. Referring to the direct testimony of David S. Sinclair at 24:11 25:3:
 - a. Confirm that the key condition discussed at 24:16-18 refers only to physical curtailments under Rider CSR.
 - b. Since Rider CSR (or its predecessors) was first approved by the Commission, please identify each instance in which LG&E would have issued a physical curtailment request but was prevented from doing so by the key condition restriction discussed at 24:16-18.
- A.1-62. a. The key condition referenced in Mr. Sinclair's testimony that requires all system generating units be dispatched or in the process of being dispatched before curtailments applies to physical curtailment events.
 - b. Prior to August 1, 2010, the Rider CSR did not require that all generating units be dispatched before issuing a curtailment request. While the Company is not able to identify the specific hours for additional physical curtailment, it is likely that CSR would be implemented consistent with the response in Question 61 in the absence of the key condition restriction.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 63

Responding Witness: David S. Sinclair

Q.1-63. Referring to the direct testimony of David S. Sinclair at 25:4-9:

- a. Please provide the Annual Generation Forecast.
- b. For each of the eight forecast CSR curtailment events, identify and explain in detail the underlying load and system conditions driving LG&E's expected need for physical curtailment.
- A.1-63.
- a. See "Section 7 Generation Forecast" on pages 20-22 of Mr. Sinclair's testimony and the "2017 Business Plan Generation & OSS Forecast" attached at Tab 16, Section 16(7)(c), Item H of the Companies' Applications.
- b. Of the eight forecasted curtailment events, two pertained only to a curtailable customer served in the Old Dominion Power service territory in Virginia, which is governed by different rules with regard to curtailment. The Companies' underlying load and system conditions for the peak hour of each of the remaining six events are summarized in the table below. Also see the response to PSC 2-54.

Curtailment Event Date	Event Time	Total Generation Capacity (MW)	Peak Hourly Load During Event (MW)	Generation Unavailable – Planned Outage (MW)	Generation Unavailable – Other (MW)	Spinning Reserves (MW)	Purchases (MW)
7/18/2017	Hours 13-15	8,136	6,406	6	1,317	406	0
7/19/2017	Hours 13-16	8,136	6,411	6	1,039	679	0
8/9/2017	Hours 14-16	8,136	6,807	6	1,628	232	538
3/12/2018	Hour 8	8,261	4,025	1,498	2,286	452	0
3/14/2018	Hour 7-8	8,261	4,095	1,498	2,330	338	0
3/15/2018	Hour 10	8,261	4,030	1,498	2,436	297	0

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 64

Responding Witness: John P. Malloy

- Q.1-64. Please identify each existing DSM and/or energy efficiency program that LG&E proposes to either close to new customers or limit incremental program participation by existing participants during the Forecasted Test Period.
- A.1-64. In the Forecasted Test Period, the Companies are not planning to end any of the current DSM programs or limit incremental program participation. The Companies' current DSM programs are approved through December 2018. The Companies will complete their re-evaluation of the programs by the end of 2017.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 65

Responding Witness: David S. Sinclair

- Q.1-65. Referring to the direct testimony of David S. Sinclair at 26:5 27:3:
 - a. Please define primary as used in the phrase primary combustion turbines.
 - b. Please define (and if possible, quantify) meaningful as used in the phrase meaningful annual load growth.
 - c. For each of the past 10 years, please provide LG&E's annual load growth.
 - d. Please provide LG&E's forecast of annual load growth for each of the next 10 years.

A.1-65.

- a. See the response to PSC 2-55(a).
- b. Meaningful load growth in this context is load growth that would require resource additions in the next three to five years, and would therefore require actions in the near term to begin developing these resources.
- c. See attached.
- d. See attached.

65c						
	Actual		WN			
	Volumes	Actual Sales	Volumes	WN Sales	Peak Hour	Peak
	(GWh)	Growth*	(GWh)	Growth	(MW)	Growth
2007	12,658	5.79%	12,269	1.09%	2,834	3.86%
2008	12,083	-4.54%	12,038	-1.88%	2,502	-11.71%
2009	11,405	-5.61%	11,596	-3.67%	2,524	0.88%
2010	12,338	8.18%	11,772	1.52%	2,852	13.00%
2011	11,641	-5.65%	11,445	-2.78%	2,704	-5.19%
2012	11,837	1.68%	11,775	2.89%	2,731	1.00%
2013	11,698	-1.17%	11,732	-0.37%	2,529	-7.40%
2014	11,817	1.02%	11,686	-0.39%	2,481	-1.90%
2015	11,767	-0.42%	11,722	0.31%	2,594	4.55%
2016	11,947	1.53%	11,811	0.76%	2,543	-1.97%

*relative to prior year

65d

	Forecasted	Forecasted	Forecasted	Forecasted		
	Volumes	Sales	Volumes	WN Sales	Peak Hour	Peak
	(GWh)	Growth**	(GWh)	Growth	(MW)	Growth
2017	11,929	-0.15%	11,929	1.00%	2,734	7.50%
2018	11,922	-0.05%	11,922	-0.05%	2,732	-0.06%
2019	11,941	0.16%	11,941	0.16%	2,738	0.23%
2020	11,943	0.02%	11,943	0.02%	2,738	-0.03%
2021	11,944	0.00%	11,944	0.00%	2,724	-0.50%
2022	11,955	0.09%	11,955	0.09%	2,736	0.45%
2023	11,969	0.12%	11,969	0.12%	2,739	0.12%
2024	12,010	0.34%	12,010	0.34%	2,748	0.31%
2025	12,035	0.21%	12,035	0.21%	2,752	0.16%
2026	12,063	0.23%	12,063	0.23%	2,757	0.17%

**2017 compared to both 2016 actual and 2016 WN; others relative to prior year

Attachment to Response to KIUC-1 Question No. 65(c-d)

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 66

Responding Witness: David S. Sinclair

- Q.1-66. Please provide LG&E's current estimated cost in current dollars of an installed combustion turbine. Provide all workpapers, studies, analyses, and documents supporting and/or underlying this estimate.
- A.1-66. The Companies' current estimated combustion turbine capital cost is \$624/kW in 2016 dollars. See the Companies' 2014 Integrated Resource Plan ("IRP"), Volume III, "2014 Reserve Margin Study" and "2014 Resource Assessment" reports. The Companies' estimated cost data for a simple-cycle combustion turbine in 2013 dollars can be found in Section 4.4.1, Table 5, on page 15 of the "2014 Reserve Margin Study." The 2014 IRP value in 2013 dollars was escalated at 2 percent per year to 2016 dollars.

See also the response to AG 1-296.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 67

Responding Witness: David S. Sinclair

- Q.1-67. Please provide a levelized fixed charge rate for a new combustion turbine using LG&E's cost of capital and tax rates. Provide all workpapers, studies, analyses, and documents supporting and/or underlying this response.
- A.1-67. The levelized fixed charge rate for a new combustion turbine is 8.12%. See attached.

Revenue Requirement Model For Fixed Charge Rate & Levelized Cost Factor

Assumptions Book Basis	\$100	F	Fixed Char	ge Rate	0.0812					
Tax Basis	\$100	É		J						
Book Life - Years	30	T	Levelized	Cost Facto	0.73					
Tax Life - Years	15	Ŀ								
Months in First Year	12									
Base Property Tax Rate	0.150%									
Property Tax Rate Escalation	0.00%									
O&M Escalation Rate	2.000%	C	CAPITAL	STRUCT	URE					
O&M Base	\$1		Debt	47.00%	4.10%					
Discount Rate	10.60%									
Cost of Capital	6.48%	(Common	53.00%	10.0%					
Income Tax Rate	38.900%									
Insurance Rate	0.085%									
Insurance Escalation Rate	0.00%									
Tax Equivalent Rate	0.00%									
Tax Depreciation Schedule	macrs									
	-	1	1	1	1	1	1	1	1	1
	Year	1	2	3	4	5	6	7	8	9
	Months	12	12	12	12	12	12	12	12	12
Deferred Taxes										
Tax Depreciation		5.00	9.50	8.55	7.70	6.93	6.23	5.90	5.90	5.90
Book Depreciation		1.67	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
Deferred Tax		1.30	2.40	2.03	1.70	1.40	1.13	1.00	1.00	1.00
Rate Base	Constr Period									
Beginning Balance	100	100	97	91	86	81	76	72	67	63
Less: Book Depreciation		(1.67)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33
Less: Deferred Taxes	-	(1.30)	(2.40)	(2.03)	(1.70)	(1.40)	(1.13)	(1.00)	(1.00)	(1.00
Ending Balance	100	97	91	86	81	76	72	67	63	59
EndYear Rate Base		97	91	86	81	76	72	67	63	59
Debt Return (Interest)		1.87	1.76	1.66	1.56	1.47	1.38	1.30	1.22	1.13
Preferred Stock Return		-	-	-	-	-	-	-	-	-
Common Equity Return		5.14	4.84	4.55	4.29	4.04	3.80	3.57	3.34	3.11
Property Tax		0.075	0.148	0.143	0.138	0.133	0.128	0.123	0.118	0.113
A&G		0.042	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Revenue Requirements (non-equity)		3.65	5.32	5.22	5.11	5.02	4.93	4.84	4.75	4.66
Revenue Requirements (equity)		8.42	7.92	7.45	7.02	6.61	6.22	5.85	5.47	5.09
Discount Rate		1.00	0.94	0.88	0.83	0.78	0.73	0.69	0.64	0.61
Present Value	\$127.97	12.07	12.44	11.18	10.05	9.04	8.15	7.33	6.59	5.90
Fixed Charge Rate		8.12%								
O&M		1	1	1	1	1	1	1	1	1
Present Value		0.90	0.83	0.77	0.71	0.65	0.60	0.56	0.51	0.47
Levelized Cost Factor		0.73								
		\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12

\$127.97 \$8.12

\$7.62 \$7.16

\$6.72 \$6.31 \$5.93 \$5.57 \$5.23 \$4.91

Revenue Requirement Model For Fixed Charge Rate & Levelized Cost Factor

Assumptions

	¢100
Book Basis	\$100
Tax Basis	\$100
Book Life - Years	30
Tax Life - Years	15
Months in First Year	12
Base Property Tax Rate	0.150%
Property Tax Rate Escalation	0.00%
O&M Escalation Rate	2.000%
O&M Base	\$1
Discount Rate	10.60%
Cost of Capital	6.48%
Income Tax Rate	38.900%
Insurance Rate	0.085%
Insurance Escalation Rate	0.00%
Tax Equivalent Rate	0.00%

Tax Depreciation Schedule

Tax Depreciation Schedule	macis									
	-	1	1	1	1	1	1	1	1	1
	Year	10	11	12	13	14	15	16	17	18
	Months	12	12	12	12	12	12	12	12	12
Deferred Taxes										
Tax Depreciation		5.90	5.90	5.90	5.90	5.90	5.90	2.95	-	-
Book Depreciation		3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
Deferred Tax		1.00	1.00	1.00	1.00	1.00	1.00	(0.15)	(1.30)	(1.30)
Rate Base	Constr Period									
Beginning Balance	100	59	54	50	46	41	37	33	30	28
Less: Book Depreciation		(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)
Less: Deferred Taxes	-	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)	0.15	1.30	1.30
Ending Balance	100	54	50	46	41	37	33	30	28	25
EndYear Rate Base		54	50	46	41	37	33	30	28	25
Debt Return (Interest)		1.05	0.96	0.88	0.80	0.71	0.63	0.57	1	0
Preferred Stock Return		-	-	-	-	-	-	-	-	-
Common Equity Return		2.88	2.65	2.42	2.19	1.96	1.73	1.57	1.46	1.35
Property Tax		0.108	0.103	0.098	0.093	0.088	0.083	0.078	0.073	0.068
A&G		0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Revenue Requirements (non-equity)		4.57	4.48	4.40	4.31	4.22	4.13	4.06	4.02	3.98
Revenue Requirements (equity)		4.72	4.34	3.97	3.59	3.21	2.84	2.56	2.39	2.21
Discount Rate		0.57	0.53	0.50	0.47	0.44	0.42	0.39	0.37	0.34
Present Value Fixed Charge Rate	\$127.97	5.28	4.71	4.19	3.72	3.29	2.89	2.59	2.35	2.13
Fixed Charge Kate										
O&M		1	1	1	1	1	1	1	1	1
Present Value		0.44	0.40	0.37	0.34	0.32	0.29	0.27	0.25	0.23
Levelized Cost Factor		~					>	/		
		\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12
	\$127.97	\$4.61	\$4.33	\$4.07	\$3.82	\$3.59	\$3.37	\$3.17	\$2.97	\$2.79

macrs

Revenue Requirement Model For Fixed Charge Rate & Levelized Cost Factor

Assumptions

Book Basis	\$100		
Tax Basis	\$100		
Book Life - Years	30		
Tax Life - Years	15		
Months in First Year	12		
Base Property Tax Rate	0.150%		
Property Tax Rate Escalation	0.00%		
O&M Escalation Rate	2.000%		
O&M Base	\$1		
Discount Rate	10.60%		
Cost of Capital	6.48%		
Income Tax Rate	38.900%		
Insurance Rate	0.085%		
Insurance Escalation Rate	0.00%		
Tax Equivalent Rate	0.00%		

Tax Depreciation Schedule	macrs									
		1	1	1	1	1	1	1	1	1
	Year_	19 12	20 12	21 12	22 12	23	24 12	25 12	26 12	27
	Months	12	12	12	12	12	12	12	12	12
Deferred Taxes										
Tax Depreciation		-	-	-	-	-	-	-	-	-
Book Depreciation		3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
Deferred Tax		(1.30)	(1.30)	(1.30)	(1.30)	(1.30)	(1.30)	(1.30)	(1.30)	(1.30)
Rate Base	Constr Period									
Beginning Balance	100	25	23	21	19	17	15	13	11	9
Less: Book Depreciation	100	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)	(3.33)
Less: Deferred Taxes	-	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Ending Balance	100	23	21	19	17	15	13	11	9	7
EndYear Rate Base		23	21	19	17	15	13	11	9	7
Debt Return (Interest)		0	0	0	0	0	0	0	0	0
Preferred Stock Return		-	-	-	-	-	-	-	-	-
Common Equity Return		1.24	1.13	1.03	0.92	0.81	0.70	0.59	0.49	0
Property Tax		0.063	0.058	0.053	0.048	0.043	0.038	0.033	0.028	0.023
A&G		0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Revenue Requirements (non-equity)		3.93	3.89	3.84	3.80	3.75	3.71	3.67	3.62	3.58
Revenue Requirements (equity)		2.03	1.86	1.68	1.50	1.33	1.15	0.97	0.80	0.62
Discount Rate		0.32	0.30	0.29	0.27	0.25	0.24	0.22	0.21	0.20
Present Value Fixed Charge Rate	\$127.97	1.93	1.74	1.57	1.42	1.28	1.15	1.03	0.92	0.82
O&M		1	1	1	2	2	2	2	2	2
Present Value Levelized Cost Factor		0.21	0.19	0.18	0.17	0.15	0.14	0.13	0.12	0.11
		\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12	\$8.12
	\$127.97	\$2.62	\$2.46	\$2.31	\$2.17	\$2.04	\$1.92	\$1.80	\$1.69	\$1.59

Revenue Requirement Model For Fixed Charge Rate & Levelized Cost Factor

Assumptions

Book Basis	\$100
Tax Basis	\$100
Book Life - Years	30
Tax Life - Years	15
Months in First Year	12
Base Property Tax Rate	0.150%
Property Tax Rate Escalation	0.00%
O&M Escalation Rate	2.000%
O&M Base	\$1
Discount Rate	10.60%
Cost of Capital	6.48%
Income Tax Rate	38.900%
Insurance Rate	0.085%
Insurance Escalation Rate	0.00%
Tax Equivalent Rate	0.00%

Tax Depreciation Schedule	macrs				
	-	1	1	1	0
	Year	28	29	30	31
	Months	12	12	12	12
Deferred Taxes					
Tax Depreciation		-	-	_	
Book Depreciation		- 3.33	- 3.33	- 3.33	- 1.67
Deferred Tax		(1.30)	(1.30)	(1.30)	(0.65)
		(1120)	(1120)	(1100)	(0.00)
Rate Base	Constr Period				
Beginning Balance	100	7	5	3	1
Less: Book Depreciation		(3.33)	(3.33)	(3.33)	(1.67)
Less: Deferred Taxes	-	1.30	1.30	1.30	0.65
Ending Balance	100	5	3	1	0
EndYear Rate Base		5	3	1	0
Debt Return (Interest)		0	0	0	0
Preferred Stock Return		-	- 0	-	-
Common Equity Return		0	0	0	0
Common Equity Retain		0	0	0	0
Property Tax		0.018	0.013	0.008	0.000
A&G		0.085	0.085	0.085	0.042
Revenue Requirements (non-equity)		3.53	3.49	3.45	1.71
Revenue Requirements (equity)		0.44	0.27	0.09	0.00
Discount Rate		0.18	0.17	0.16	0.15
Present Value Fixed Charge Rate	\$127.97	0.73	0.65	0.57	0.26
O&M		2	2	2	2
Present Value		0.10	2 0.09	2 0.09	2 0.08
Levelized Cost Factor		0.10	0.09	0.09	0.00
		\$8.12	\$8.12	\$8.12	\$8.12
	\$127.97	\$1.49	\$1.40	\$1.31	\$1.23
	+//				

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 68

Responding Witness: David S. Sinclair

- Q.1-68. Please provide the estimated fixed O&M for a new combustion turbine in current dollars. Provide all workpapers, studies, analyses, and documents supporting and/or underlying this response.
- A.1-68. The Companies' current estimated combustion turbine fixed O&M cost is \$29.7/kW-yr in 2016 dollars, which comprises \$21.9/kW-yr for firm gas transport and \$7.7/kW-yr for other fixed O&M. See the response to Question No. 66. The 2014 IRP values in 2013 dollars were escalated at 2 percent per year to 2016 dollars.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 69

Responding Witness: David S. Sinclair

- Q.1-69. Please provide LG&E's required reserve margin for capacity planning. Provide all workpapers, studies, analyses, and documents supporting and/or underlying this response.
- A.1-69. The Companies' planning reserve margin range is 16% 21%. See the Companies' 2014 Integrated Resource Plan ("IRP"), Volume III, "2014 Reserve Margin Study." See also the response to AG 1-296.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 70

Responding Witness: Robert M. Conroy

- Q.1-70. Please provide a copy of LG&E's most recent integrated resource plan.
- A.1-70. See the response to AG 1-296.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 71

Responding Witness: David S. Sinclair

- Q.1-71. Please provide all workpapers, studies, analyses, and documents underlying and supporting LG&E's proposed change in the natural gas price index used to determine the automatic buy-through price in Rider CSR.
- A.1-71. See the response to Question No. 48(a).

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 72

Responding Witness: Robert M. Conroy

- Q.1-72. Referring to the direct testimony of Robert M. Conroy at 16:20-23:
 - a. Explain in detail the conditions under which LG&E would no longer "continue to allow the current customers under the CSR service schedule to remain CSR customers for an indefinite period of time...."
 - b. Explain in detail why "the Company is not proposing to remove CSR from its tariff at this time."

A.1-72.

- a. LG&E has not established such a set of conditions.
- b. LG&E is not proposing the remove CSR from its tariff at this time because existing CSR customers' curtailable load is included as a resource in existing plans and could help LG&E meet its reserve margin requirements in the future.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 73

Responding Witness: Robert M. Conroy / William S. Seelye

- Q.1-73. Referring to the direct testimony of Robert M. Conroy at 17:1-3, explain in detail LG&E's rationale for maintaining the \$16 per kVA non-compliance charge in the proposed Rider CSR while reducing the CSR credits by more than 40 percent.
- A.1-73. The purpose of the non-compliance charge is to encourage customers to curtail service when called upon to interrupt their load. The \$16 per kVA non-compliance charge was first introduced in Case No. 2003-00433 for LG&E and Case No. 2003-00434 for KU. The \$16 per kVA non-compliance charge has not changed since it was first introduced in the 2003 rate cases. The \$16 non-compliance charge was based on approximately four months of the CSR credit, which was approximately \$4/kW at the time. (See Direct Testimony of William Steven Seelye filed in Case Nos. 2003-00433 and 2003-00434). However, as the CSR credit increased over time there was no corresponding increase in the non-compliance charge. The current level of the CSR credit for LG&E and KU is \$6.40 to \$6.50, depending on the service voltage. Four months of the current credit would have resulted in a non-compliance charge of around \$26. At the proposed CSR credit in this proceeding, four months of the credit would result in a non-compliance charge of \$13 to \$14.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 74

Responding Witness: William S. Seelye

- Q.1-74. Provide in native format all workpapers, studies, analyses, and documents supporting and/or underlying the \$16 per kW Non-Compliance Charge in the proposed CSR rider.
- A.1-74. See the response to KIUC 1-73.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 75

Responding Witness: William S. Seelye

- Q.1-75. Referring to the direct testimony of William Steven Seelye at Exhibit WSS-3:
 - a. Please provide the exhibit in Excel format with working formulas and all links intact.
 - b. Please provide all workpapers, studies, analyses, and documents supporting and/or underlying the exhibit.
 - c. Please identify and provide the specific information and data source for each row item in the column labeled Description in the exhibit.
- A.1-75.
- a. See the Att_LGE_PSC_1-54_LGECSR.xlsx spreadsheet provided in response to PSC 1-54.
- b. See attached.
- c. The costs (plant, accumulated depreciation, accumulated deferred income taxes, depreciation expenses, operation and maintenance expenses, property taxes) shown on Exhibit WSS-3 are from the Company's financial forecast for the test-year. The rate of return is based on the weighted cost of capital proposed in this proceeding. Income taxes are based on the composite income tax rate used to determine revenue requirements in this proceeding. The loss factors are those used in the Cost of Service Studies.

LGE - CTs (\$)

	Location	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017
Plant	Brown	73,263,212.14	73,263,212.14	73,263,212.14	73,263,212.14	73,263,212.14	77,854,211.93
Accumulated Depreciation	Brown	(36,112,085.04)	(36,422,723.56)	(36,733,362.07)	(37,044,000.59)	(37,354,639.10)	(37,461,686.70)
CWIP	Brown	2,653,837.63	2,653,837.63	7,553,837.63	7,553,837.63	15,266,999.87	8,942,000.00
RWIP	Brown	-	-	-	-	400,000.00	-
Total	Brown	39,804,964.73	39,494,326.21	44,083,687.70	43,773,049.18	51,575,572.91	49,334,525.23
Depreciation Expense	Brown		310,638.52	310,638.52	310,638.52	310,638.52	319,047.60
Plant	Trimble	126,527,340.02	126,777,340.02	126,777,340.02	126,777,340.02	128,754,417.30	128,754,417.30
Accumulated Depreciation	Trimble	(52,860,897.85)	(53,302,405.74)	(53,744,371.70)	(54,186,337.65)	(54,631,498.85)	(55,079,855.29)
CWIP	Trimble	6,661,519.78	6,732,519.78	6,793,519.78	7,115,769.78	1,281,735.01	1,281,735.01
RWIP	Trimble	-	-	-	-	-	-
Total	Trimble	80,327,961.95	80,207,454.06	79,826,488.10	79,706,772.15	75,404,653.46	74,956,297.02
Depreciation Expense	Trimble		441,507.89	441,965.96	441,965.96	445,161.20	448,356.44
Plant	Paddys 13	44,618,383.66	44,618,383.66	44,618,383.66	44,618,383.66	44,618,383.66	44,856,883.66
Accumulated Depreciation	Paddys 13	(15,834,010.51)	(16,014,833.22)	(16,195,655.92)	(16,376,478.63)	(16,557,301.34)	(16,738,527.17)
CWIP	Paddys 13	-	-	-	-	50,000.00	-
RWIP	Paddys 13	-	-	-	-	-	-
Total	Paddys 13	28,784,373.15	28,603,550.44	28,422,727.74	28,241,905.03	28,111,082.32	28,118,356.49
Depreciation Expense	Paddys 13		180,822.71	180,822.71	180,822.71	180,822.71	181,225.84
Note: Plant balances above include lan	d from Plant Account :	134020 - Land					
	Paddys 13	2,956.70	2,956.70	2,956.70	2,956.70	2,956.70	2,956.70
	Brown	5,015.43	5,015.43	5,015.43	5,015.43	5,015.43	5,015.43
	Total	7,972.13	7,972.13	7,972.13	7,972.13	7,972.13	7,972.13

12/31/2017	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	13 mos average
77,854,211.93	77,854,211.93	77,854,211.93	77,854,211.93	77,854,211.93	77,854,211.93	77,854,211.93	76,088,442.78
(37,789,143.38)	(38,116,600.06)	(38,444,056.74)	(38,771,513.42)	(39,098,970.10)	(39,426,426.78)	(39,753,883.46)	(37,886,853.15)
8,942,000.00	8,942,000.00	8,942,000.00	8,942,000.00	8,942,000.00	8,942,000.00	8,942,000.00	8,247,565.41
-	-	-	-	-	-	-	30,769.23
49,007,068.55	48,679,611.87	48,352,155.19	48,024,698.51	47,697,241.83	47,369,785.15	47,042,328.47	46,479,924.27
327,456.68	327,456.68	327,456.68	327,456.68	327,456.68	327,456.68	327,456.68	3,853,798.42
129,203,296.01	129,203,296.01	129,203,296.01	129,203,296.01	129,203,296.01	129,203,296.01	129,203,296.01	128,368,558.98
(55,529,023.43)	(55,979,003.29)	(56,428,983.14)	(56,878,963.00)	(57,328,942.86)	(57,778,922.71)	(58,228,902.57)	(55,535,239.08)
367,518.70	367,518.70	367,518.70	367,518.70	367,518.70	1,201,644.69	1,201,644.69	2,623,667.85
-	-	-	-	-	-	-	-
74,041,791.28	73,591,811.42	73,141,831.57	72,691,851.71	72,241,871.85	72,626,017.99	72,176,038.13	75,456,987.75
449,168.15	449,979.86	449,979.86	449,979.86	449,979.86	449,979.86	449,979.86	5,368,004.72
44,856,883.66	44,856,883.66	44,856,883.66	44,856,883.66	44,856,883.66	44,909,883.66	44,909,883.66	44,773,306.74
(16,920,156.14)	(17,101,785.11)	(17,283,414.08)	(17,465,043.04)	(17,646,672.01)	(17,828,394.85)	(18,010,211.57)	(16,920,960.28)
-	-	-	-	30,000.00	-	-	6,153.85
-	-	-	-	-	-	-	-
27,936,727.52	27,755,098.55	27,573,469.58	27,391,840.62	27,240,211.65	27,081,488.81	26,899,672.09	27,858,500.31
181,628.97	181,628.97	181,628.97	181,628.97	181,628.97	181,722.84	181,816.71	2,176,201.06
2,956.70	2,956.70	2,956.70	2,956.70	2,956.70	2,956.70	2,956.70	2,956.70
5,015.43	5,015.43	5,015.43	5,015.43	5,015.43	5,015.43	5,015.43	5,015.43
7,972.13	7,972.13	7,972.13	7,972.13	7,972.13	7,972.13	7,972.13	7,972.13

LOUISVILLE GAS & ELECTRIC COMPANY ELECTRIC Accumulated Deferred Taxes on Income As of June 30, 2018 Brown Combustion Turbines <u>Reg 1.167(I)-(h)(6)ii</u> (Dollars)

Line <u>No.</u>					<u>Amount</u>
1	Projected Accumulated Deferred Taxes at June 30, 2017				\$ 13,555,277
2	Projected Accumulated Deferred Taxes at June 30, 2018				 12,875,811
3	Decrease in Accumulated Deferred Taxes for the forward ye	ar			\$ (679,466)
4	Balance June 30, 2017		Monthly Decrease	<u>Proration</u>	\$ 13,555,277
5	July 1-31, 2017	\$	(20,102)	335/365	(18,450)
6	August 1-31, 2017		(20,102)	304/365	(16,743)
7	September 1-30, 2017		(20,102)	274/365	(15,090)
8	October 1-31, 2017		(20,102)	243/365	(13,383)
9	November 1-30, 2017		(23,373)	213/365	(13,640)
10	December 1-31, 2017		(26,644)	182/365	(13,286)
11	January 1-31, 2018		(91,507)	151/365	(37,856)
12	February 1-28, 2018		(91,507)	123/365	(30,837)
13	March 1-31, 2018		(91,507)	92/365	(23,065)
14	April 1-30, 2018		(91,507)	62/365	(15,544)
15	May 1-31, 2018		(91,507)	31/365	(7,772)
16	June 1-30, 2018		(91,507)	1/365	 (251)
17	Balance June 30, 2017 plus pro rata portion of monthly decr	ease	5		\$ 13,349,360

LOUISVILLE GAS & ELECTRIC COMPANY ELECTRIC Accumulated Deferred Taxes on Income As of June 30, 2018 Paddy's Run Combustion Turbines <u>Reg 1.167(I)-(h)(6)ii</u> (Dollars)

Line <u>No.</u>					<u>Amount</u>
1	Projected Accumulated Deferred Taxes at June 30, 2017				\$ 9,718,430
2	Projected Accumulated Deferred Taxes at June 30, 2018				 9,124,081
3	Decrease in Accumulated Deferred Taxes for the forward ye	ar			\$ (594,349)
4	Balance June 30, 2017		Monthly Decrease	<u>Proration</u>	\$ 9,718,430
5	July 1-31, 2017	\$	(47,351)	335/365	(43,459)
6	August 1-31, 2017		(47,351)	304/365	(39,438)
7	September 1-30, 2017		(47,351)	274/365	(35,546)
8	October 1-31, 2017		(47,351)	243/365	(31,524)
9	November 1-30, 2017		(47,508)	213/365	(27,724)
10	December 1-31, 2017		(47,665)	182/365	(23,767)
11	January 1-31, 2018		(51,610)	151/365	(21,351)
12	February 1-28, 2018		(51,610)	123/365	(17,392)
13	March 1-31, 2018		(51,610)	92/365	(13,009)
14	April 1-30, 2018		(51,610)	62/365	(8,767)
15	May 1-31, 2018		(51,647)	31/365	(4,386)
16	June 1-30, 2018		(51,683)	1/365	 (142)
17	Balance June 30, 2017 plus pro rata portion of monthly decr	eases	5		\$ 9,451,925

LOUISVILLE GAS & ELECTRIC COMPANY ELECTRIC Accumulated Deferred Taxes on Income As of June 30, 2018 Trimble Combustion Turbines <u>Reg 1.167(I)-(h)(6)ii</u> (Dollars)

Line <u>No.</u>						<u>Amount</u>
1	Projected Accumulated Deferred Taxes at June 30, 2017				\$	23,642,941
2	Projected Accumulated Deferred Taxes at June 30, 2018				. <u> </u>	24,015,326
3	Increase in Accumulated Deferred Taxes for the forward ye	ar			\$	372,386
4	Balance June 30, 2017	Monthly Inc	rease/Decrease	<u>Proration</u>	\$	23,642,941
5	July 1-31, 2017	\$	75,989	335/365		69,744
6	August 1-31, 2017		75,811	304/365		63,141
7	September 1-30, 2017		75,811	274/365		56,910
8	October 1-31, 2017		74,568	243/365		49,644
9	November 1-30, 2017		73,325	213/365		42,790
10	December 1-31, 2017		73,010	182/365		36,405
11	January 1-31, 2018		(12,688)	151/365		(5,249)
12	February 1-28, 2018		(12,688)	123/365		(4,276)
13	March 1-31, 2018		(12,688)	92/365		(3,198)
14	April 1-30, 2018		(12,688)	62/365		(2,155)
15	May 1-31, 2018		(12,688)	31/365		(1,078)
16	June 1-30, 2018		(12,688)	1/365	. <u> </u>	(35)
17	Balance June 30, 2017 plus pro rata portion of monthly incr	eases/decrease	25		\$	23,945,584

Large Frame CT Labor Costs

n of Total w Labels	Column Labels 0100	0110	Grand Tota
242715: TOTAL PR13	368,350	487,655	856,00
408106	(16,797)	•	
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	(16,797)	-	(
549100	175,162	121,895	297,05
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	22,104	19,599	41,70
PLMS: TOTAL MISCELLANEOUS LABOR	5,628	10,000	5,62
PLNB: NON BURDENABLE LABOR	(84,062)	84,062	5,02
PLOT: TOTAL OVERTIME LABOR	27,869	01,002	27,86
PLST: TOTAL STRAIGHT TIME LABOR	168,332		168,33
PNMA: ADJUSTING ENTRIES	(18,234)	18,234	100,55
PNOC: TOTAL CONTRACTOR	26,359	10,234	26,35
PNOR: TOTAL RESIDENTIAL CONTRACTORS	21,918		20,55
PNPO: PURCHASED MATERIALS - OTHERS	5,248		5,24
550100	5,706	5,058	10,76
PNMA: ADJUSTING ENTRIES	(5,058)	-	10,70
PNMA: ADJOSTING LIVINES PNML: LEASE-RENTAL	5,514	3,038	5,51
PNML: LEASE-NEW FAL PNPV: PURCHASED VARIABLE MATERIALS	5,250		5,25
552100	25,426	22,546	5,25 47,97
PNMA: ADJUSTING ENTRIES	(22,546)	-	47,57
PNMA. ADJOSTING ENTRIES PNOC: TOTAL CONTRACTOR		22,540	
PNOC: TOTAL CONTRACTOR PNPO: PURCHASED MATERIALS - OTHERS	25,286		25,28
553010	22,686	130 765	22,68 299,54
	170,784	128,765	-
PLST: TOTAL STRAIGHT TIME LABOR PNMA: ADJUSTING ENTRIES	25,583	120 705	25,58
	(128,765)	128,765	
PNMI: INFORMATION TECHNOLOGY	80,656		80,65
	187,690		187,69
PNPO: PURCHASED MATERIALS - OTHERS	5,620	110 451	5,62
554100	81,212	119,451	200,66
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	22,104	19,599	41,70
PLMS: TOTAL MISCELLANEOUS LABOR	5,628		5,62
PLNB: NON BURDENABLE LABOR	(84,062)	84,062	27.00
PLOT: TOTAL OVERTIME LABOR	27,869		27,86
PLST: TOTAL STRAIGHT TIME LABOR	96,812		96,81
PNMA: ADJUSTING ENTRIES	(15,790)	15,790	
PNOC: TOTAL CONTRACTOR	10,404		10,40
PNPO: PURCHASED MATERIALS - OTHERS	18,247		18,24
925002	(2,343)	-	
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	(2,343)	2,343	
926019	(70,800)		
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	(70,800)		
42735: TOTAL TRIMBLE COUNTY CTS	701,998	1,999,627	2,701,62
408106	(59,060)		
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	(59,060)		
548010	192,706	376,827	569,53
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	32,371	61,440	93,81
PLNB: NON BURDENABLE LABOR	(314,428)	314,428	
PLOT: TOTAL OVERTIME LABOR	185,648		185,64
PLST: TOTAL STRAIGHT TIME LABOR	290,074		290,07
PNMA: ADJUSTING ENTRIES	(959)	959	
553010	825,555	1,306,537	
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	32,107	61,439	93,54
PLNB: NON BURDENABLE LABOR	(278,718)	276,720	(1,99
PLOT: TOTAL OVERTIME LABOR	112,878		112,87
PLST: TOTAL STRAIGHT TIME LABOR	313,439		313,43
PNMA: ADJUSTING ENTRIES	(968,378)	968,378	
PNOC: TOTAL CONTRACTOR	316,342		316,34
PNPO: PURCHASED MATERIALS - OTHERS	1,297,425		1,297,42
	460		

925002	(8,244)	8,244	C
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	(8,244)	8,244	C
926019	(248,959)	248,959	0
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	(248,959)	248,959	C
42765: TOTAL BROWN CTS	1,162,571	3,527,449	4,690,020
408106	25,013	(25,013)	C
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	25,013	(25,013)	C
546100	87,980	324,884	412,864
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	16,169	64,511	80,680
PLNB: NON BURDENABLE LABOR	63,387	(63,387)	C
PLOT: TOTAL OVERTIME LABOR		47,506	47,506
PLST: TOTAL STRAIGHT TIME LABOR		268,790	268,790
PNMA: ADJUSTING ENTRIES	8,424	(8,424)	(
PNOC: TOTAL CONTRACTOR		4,884	4,884
PNPO: PURCHASED MATERIALS - OTHERS		11,004	11,004
548010		10,506	10,506
PNOC: TOTAL CONTRACTOR		10,506	10,506
549002		64,044	64,044
PNOC: TOTAL CONTRACTOR		64,044	64,044
549100	69,384	212,814	282,198
PNMA: ADJUSTING ENTRIES	69,384	(69,384)	(
PNME: EDUCATION AND TRAINING		6,582	6,582
PNMO: OTHER MISCELLANEOUS EXPENSES		26,682	26,682
PNMX: TRAVEL		6,582	6,582
PNOC: TOTAL CONTRACTOR		44,298	44,298
PNPO: PURCHASED MATERIALS - OTHERS		182,796	182,796
PNPV: PURCHASED VARIABLE MATERIALS		15,258	15,258
551100	9,506	134,412	143,918
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	1,848	27,198	29,046
PLNB: NON BURDENABLE LABOR	7,244	(7,244)	- / - (
PLOT: TOTAL OVERTIME LABOR	,	17,103	17,103
PLST: TOTAL STRAIGHT TIME LABOR		96,762	96,762
PNMA: ADJUSTING ENTRIES	414	(1,549)	(1,135
PNOC: TOTAL CONTRACTOR		0	(1)100
PNPO: PURCHASED MATERIALS - OTHERS		2,142	2,142
552100	3,575	15,398	18,973
PNMA: ADJUSTING ENTRIES	3,575	(2,440)	1,13
PNOC: TOTAL CONTRACTOR	5,575	17,838	17,838
553010	809,943	1,743,309	2,553,252
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	52,997	(52,997)	2,333,232
PLNB: NON BURDENABLE LABOR		(108,348)	(
PNMA: ADJUSTING ENTRIES	648,598	(648,598)	(
PNMO: OTHER MISCELLANEOUS EXPENSES	048,398	59,076	59,076
PNMO: OTHER MISCELLANEOUS EXPENSES PNOC: TOTAL CONTRACTOR		1,998,174	1,998,174
PNOR: TOTAL RESIDENTIAL CONTRACTORS		66,354	66,354
PNPO: PURCHASED MATERIALS - OTHERS		429,648	429,648
		992,756	992,756
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS		200,739	200,739
PLOT: TOTAL OVERTIME LABOR		125,417	125,41
PLST: TOTAL STRAIGHT TIME LABOR		666,600	666,600
PNOC: TOTAL CONTRACTOR		0	(
554100	53,114	158,395	211,509
PNMA: ADJUSTING ENTRIES	53,114	(53,114)	(
PNMW: FEES AND PERMITS		14,236	14,23
PNOC: TOTAL CONTRACTOR		118,955	118,95
PNPO: PURCHASED MATERIALS - OTHERS		78,318	78,31
925002	3,032	(3,032)	(
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	3,032	(3,032)	(
926019	101,024	(101,024)	(
520015			
PLBB: LABOR BURDENS NON-RETIREMENT BENEFITS	101,024	(101,024)	(

CT'S

Prop Tax Expense (in dollars \$)

Kentucky Utilities Company

	1/2 Year	1/2 Year	2017					
	2017	2018	July	August	September	October	November	December
Brown	98,596	99,152	16,433	16,433	16,433	16,433	16,433	16,433
Trimble	110,171	106,146	18,362	18,362	18,362	18,362	18,362	18,362
Paddys 13	19,931	18,796	3,322	3,322	3,322	3,322	3,322	3,322

Louisville Gas and Electric Company

	1/2 Year	1/2 Year	2017					
	2017	2018	July	August	September	October	November	December
Brown	31,280	36,755	5,213	5,213	5,213	5,213	5,213	5,213
Trimble	58,272	55,531	9,712	9,712	9,712	9,712	9,712	9,712
Paddys 13	22,266	20,953	3,711	3,711	3,711	3,711	3,711	3,711

2018							
January	February	March	April	May	June	Total	
16,525	16,525	16,525	16,525	16,525	16,525	197,748	
17,691	17,691	17,691	17,691	17,691	17,691	216,317	
3,133	3,133	3,133	3,133	3,133	3,133	38,727	

2018						
January	February	March	April	May	June	Total
6,126	6,126	6,126	6,126	6,126	6,126	68,035
9,255	9,255	9,255	9,255	9,255	9,255	113,803
3,492	3,492	3,492	3,492	3,492	3,492	43,219

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 76

Responding Witness: David S. Sinclair / Daniel K. Arbough

- Q.1-76. Please identify the carrying cost(s) used by LG&E in its most recent integrated resource plan to evaluate the cost of alternative resource options, specify the components of such carrying cost, provide the formula used to derive the carrying cost, and explain its derivation in detail.
- A.1-76. LG&E's 2014 IRP carrying cost was 7.19%, which was composed of LG&E's equity portion (55.1%) multiplied by LG&E's return on equity (10.25%), plus LG&E's debt portion (44.9%) multiplied by LG&E's cost of debt (3.43%).

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 77

Responding Witness: David S. Sinclair / Daniel K. Arbough

- Q.1-77. Please identify the carrying cost(s) used by LG&E in its current analyses of generation resource options, specify the components of such carrying cost, provide the formula used to derive the carrying cost, and explain its derivation in detail.
- A.1-77. LG&E's current carrying cost is 7.23%, which is composed of LG&E's equity portion (53%) multiplied by LG&E's return on equity (10%), plus LG&E's debt portion (47%) multiplied by LG&E's cost of debt (4.10%).

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 78

Responding Witness: Robert M. Conroy / William S. Seelye

- Q.1-78. Please provide excel versions, with formulas intact, of each of the exhibits presented by LGE witnesses Robert Conroy and Steven Seelye.
- A.1-78. See the responses to PSC 1-53 and PSC 1-54.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 79

Responding Witness: Robert M. Conroy / William S. Seelye

- Q.1-79. Please provide all supporting workpapers that support Mr. Conroy's testimony and exhibits and Mr. Seelye's testimony and exhibits. If such workpapers are available in excel format, please provide with formulas intact.
- A.1-79. See the responses to PSC 1-53 and PSC 1-54.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 80

Responding Witness: William S. Seelye

- Q.1-80. To the extent not provided in response to the previous question, please provide the following information for each rate class/rate schedule included as a separate class in the class cost of service study for the test year 12 months ending June 2018:
 - a. monthly system peak load (LGE and KU separately stated and combined).
 - b. the load of each rate class at the time of the monthly LGE/KU system peak, showing the following:
 - 1. load at meter
 - 2. losses
 - 3. load at generation
 - c. Monthly mWh energy at the generation voltage level for the rate class/rate schedule.
 - d. Energy and demand loss factors for each voltage level, by rate class/rate schedule, at which customers on the rate class/rate schedule take service.
 - e. Monthly mWh energy sales at the meter, separately stated for each voltage at which customers in each rate class/rate schedule take service, by rate class/rate schedule (for example, the metered mWh for Rate PS secondary and Rate PS primary by month).

A.1-80.

- a. See the attachment to PSC 2-109.
- b. See the response to part a.
- c. See the response to part a.
- d.

Rate Schedule	Energy Loss Factor	Demand Loss Factor
Residential Service	6.125%	7.098%
General Service	6.125%	7.098%
PS Primary	4.087%	5.290%
PS Secondary	6.125%	7.098%
TOD Primary	4.087%	5.290%
TOD Secondary	6.125%	7.098%
RTS	2.221%	2.728%
Special Contract #1	4.087%	5.290%
Special Contract #2	4.087%	5.290%
Unmetered Lighting	6.125%	7.098%
Traffic Energy	6.125%	7.098%
Lighting Energy	6.125%	7.098%

e. See the response to part a.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 81

Responding Witness: William S. Seelye

- Q.1-81. With regard to LGE WSS-17 (LOLP), please provide all supporting workpapers, in excel format with all formulas intact, used to develop this exhibit. This would include, but not be limited to:
 - a. hourly system load
 - b. hourly rate class load at:
 - 1. meter
 - 2. generation voltage
 - 3. loss factor used to convert metered load into load at generation
 - c. hourly LOLP for the combined KU-LGE system
- A.1-81. See the response to PSC 2-109.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 82

Responding Witness: William S. Seelye / David S. Sinclair

- Q.1-82. Please provide the output of the analysis used to develop hourly LOLP. Provide in excel format, with formulas intact.
- A.1-82. See the response to AG 1-294(a).

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 83

Responding Witness: William S. Seelye

- Q.1-83. Provide, for the past three years (2016, 2015 and 2014) the following actual information:
 - a. monthly system peak load (LGE and KU separately stated and combined system.
 - b. date and hour of the LGE + KU monthly peaks
 - c. date and hour of the separate LGE and KU monthly peaks

A.1-83.

- a. See attached.
- b. See attached.
- c. See attached.

83abc

	Combined	Date	Hour*	KU	Date	Hour	LG&E	Date	Hour
2014	7,114	6-Jan-14	20	5,068	7-Jan-14	8	2,481	19-Jun-14	15
2015	7,079	20-Feb-15	7	5,112	20-Feb-15	7	2,594	29-Jul-15	15
2016	6,458	26-Jul-16	15	4,415	19-Jan-16	7	2,543	19-Jul-16	15

*Hour signifies hour beginning

Attachment to Response to KIUC-1 Question No. 83(a-c) Page 1 of 1 Seelye/Sinclair

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 84

Responding Witness: William S. Seelye

- Q.1-84. Please provide a description of how AMS costs allocated in the class cost of service studies presented by Mr. Seelye (WSS-23, WSS-24)?
- A.1-84. AMS costs are functionally assigned, classified, and allocated on the basis of the FERC plant and expense account in which the costs are included for the test year. Specifically, all AMS plant costs are included in metering plant Account No. 370. AMS operation and maintenance expenses are included in Account No. 586 – Meter Expenses, Account No. 597 – Maintenance of Meters, Account No. 903 – Customer Records and Collection Expenses, and Account No. 910 – Miscellaneous Customer Service Expenses. The majority of the expenses for AMS are included in Accounts 597 and 903. These accounts are classified as customer-related in the cost of service study.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 85

Responding Witness: William S. Seelye

- Q.1-85. Please provide any information available to Mr. Seelye, the Prime Group or KU regarding the following:
 - a. Any regulatory jurisdiction that has adopted the LOLP cost of service method used by Mr. Seelye in this case.
 - b. For each such jurisdiction, please provide a copy of a Commission Order addressing this issue.
 - c. Identification of any electric utility that supported the LOLP method in testimony before a state regulatory commission. Please identify the name of the utility, the case number and a copy of the testimony.
 - d. Identification of any electric utility in KY that has presented testimony before the KPSC in support of the LOLP cost of service method. For each such utility, please provide the name of the utility, the case number and a copy of the testimony.

A.1-85.

- a. See the response to PSC 2-86.
- b. See the response to PSC 2-86.
- c. See the response to PSC 2-86.
- d. See the response to PSC 2-86.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 86

Responding Witness: William S. Seelye

- Q.1-86. Please provide any testimony, papers or presentations prepared by Mr. Seelye or any other employee of the Prime Group in the past ten years which addresses the LOLP cost of service methodology. This would include all testimony, papers or presentations supporting the LOLP method and testimony opposing the LOLP method.
- A.1-86. These are the first proceedings in which Mr. Seelye or other employees of The Prime Group have submitted a cost of service study using the LOLP methodology.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 87

Responding Witness: Robert M. Conroy / William S. Seelye

- Q.1-87. With regard to the decision by KU to present an LOLP cost of service study in this case, please provide all memoranda, emails or other writings that address this decision prepared in the past two years.
- A.1-87. There were no memoranda, emails or other writings that address the decision to use the LOLP methodology. Mr. Seelye described the LOLP methodology in meetings and presented the results of the BIP methodology and LOLP methodology which were filed in this proceeding.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 88

Responding Witness: William S. Seelye

- Q.1-88. With regard to Mr. Seelye's testimony at 2:6, please provide a complete description of the methodologies that LGE and KU utilize to plan generation resources. Please provide the same information for transmission resources.
- A.1-88. See the "Annual Generation Forecast Process" attached at Tab 16, Section 16(7)(c), Item G of the Companies' Applications. See also the Companies' 2014 Integrated Resource Plan ("IRP"), Volume III, "2014 Reserve Margin Study" and "2014 Resource Assessment" reports. See also the response to AG 1-296.

See also the attached Transmission System Planning Guidelines.



Planning Coordinator and/or Transmission Planner

TRANSMISSION SYSTEM PLANNING GUIDELINES

Effective Date: September 28, 2016

Approved by:

Matthew Burns, Group Leader Transmission Planning

Delyn Kilpack, Manager - Transmission Strategy & Planning

Christopher Balmer, Director - Transmission Strategy & Planning

Ssee, VP- Transmission $\frac{(V)}{\text{Tom Jes}}$

Transmission/Generation Services John Voyles,

Date: <u>9/20/16</u>

Date: 9/20/20/6

Date: 9/20/2016

Date: 9/21/2016

Date: 9/28/16

Revision History

Date	Description			
June 6, 1998	Initial LGEE document to establish guidelines applicable to both LG&E and KU			
March 11, 2005	Expanded Table 1			
March 1, 2007	Added NERC Categories to Table 1 and expanded			
May 7, 2007	Better quantified thermal overload and voltage violations and added Section 4 – Impacted Facilities			
September 11, 2007	Added section describing how Guidelines exceed NERC requirements			
May 1, 2008	Added effective date, signatures, Revision History, Contingency			
	Selection criteria, updated Tables 2 & 3 and updated certain references			
July 1, 2008	Updated performance requirements and incorporated SOL Methodology			
August 14, 2009	Added statement reiterating comparable treatment of service requests per FERC Order.			
November 30, 2010	Changed Company name from E.ON to LG&E/KU; edited to match			
	other guidelines; added detail to stability section			
September 1, 2012	General Update			
	Added detail to stability analysis section			
December 20, 2013	General Update			
	Added detail to multiple sections to provide clarification			
December 30, 2013	Correct error in footnote 13 on page 8			
July 30, 2014	Changes required to address new TPL-001-4 standard			
October 30, 2014	Make corrections; section 5.8, 5.10, 6.4, 7.2, 7.5.2, 8.2, Attachment A			
September 15, 2015	Section 1: applicability to 2015 TEP removed; section 5.4 details of			
	load scenarios described; section 5.6 DNR changed to NITS capacity;			
	added section 5.8 to described ratings in off-peak models; removed			
	unnecessary paragraph 5.10.1; section 5.12 added language in case			
	ERAG models are late; section 6and 6.7 removed flowgate analysis			
	requirement; added section 6.2.1.1 details of sensitivity study			
	requirements; section 6.6 added language to match TPL-001-4 2.5;			
	section 6.7 added NITS capacity sensitivity study; previous section 8.2			
	"Corrective Action Plan" moved to new section 10; section 8.2 added			
	clarification for TPL-001-4 footnote 12; revised stability criteria to			
	accommodate load inductor model section 8 and 9.2; RC requested			
-	changes to Instability Identification Section 9.1 and 9.2.			
September 28, 2016	Make changes for MOD-032 data requests. Change identification of Cascading/Instability; Correct error in 7.7.1 that says "single line to			
	ground". Clarify which 69 kV buses are monitored for voltage (Section			
	8.2); corrected angular stability in Section 8.3.1; made criteria for			
	generator synchronism match TPL-001-4 (Section 8.3.5 through 8.3.7).			

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1 Purpose

This document describes the guidelines used for developing the LG&E and KU Energy LLC (LG&E and KU) Transmission Expansion Plan (TEP). The TEP is intended to show compliance with NERC Reliability Standard TPL-001-4. LG&E and KU is registered as both a Planning Coordinator and Transmission Planner. The LG&E and KULG&E and KU Transmission Planning Group performs the functions for both the Planning Coordinator and Transmission Planner. This document establishes the minimum planning criteria for the LG&E and KU transmission System. The transmission System includes equipment and Facilities operated at 69 kV and above.

2 Overview

The primary purpose of LG&E and KU's transmission System is to reliably transmit electrical energy from Designated Network Resources to Network Loads. Interconnections to other transmission Systems have been established to increase the reliability of LG&E and KU's transmission System and to provide access to emergency generation sources for Network Customers.

The Federal Energy Regulatory Commission (FERC) requires all public utilities that own, control or operate facilities used for transmitting electric energy in interstate commerce have a non-discriminatory Open Access Transmission Tariff (OATT). LG&E and KU's Operating Companies have an OATT on file with FERC to provide Point to Point Transmission Service and Network Integration Transmission Service. LG&E and KU is committed to provide the same reliability and priority of service firm Point to Point Transmission Service for its network customers. LG&E and KU is committed to ensuring that customers with comparable service requests are treated comparably for transmission planning purposes.

3 NERC Reliability Standards Compliance

NERC Reliability Standard TPL-001-4 governs the requirements for planning the interconnected Bulk Electric System (BES) such that the network can be operated to supply real and reactive forecasted loads and projected Firm (non-recallable reserved) Transmission Services. LG&E and KU's Transmission System Planning Guidelines is intended to meet or exceed the requirements of TPL-001-4.

4 Definitions

The following is a list of NERC definitions used in these Planning Guidelines and can be found in the NERC Glossary.

Balancing Authority (BA): The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

Bulk Electric System (BES): Definition is too lengthy to include in this document. It should be reviewed on the NERC Glossary of terms.

Bus-tie Breaker: A circuit breaker that is positioned to connect two individual substation bus configurations.

Cascading: The uncontrolled successive loss of system elements triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be restrained from sequentially spreading beyond an area predetermined by studies.

Capacity Benefit Margin (CBM): The amount of firm transmission transfer capability preserved by the transmission provider for Load-Serving Entities (LSEs), whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies.

Consequential Load: All Load that is no longer served by the Transmission system as a result of Transmission Facilities being removed from service by a Protection System operation designed to isolate the fault.

Contingency: The unexpected failure or outage of a system component, such as a generator, transmission line, circuit breaker, switch or other electrical element.

Corrective Action Plan(s): A list of actions and an associated timetable for implementation to remedy a specific problem.

Demand Side Management (DSM): The term for all activities or programs undertaken by Load-Serving Entity or its customers to influence the amount or timing of electricity they use.

Element: Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An element may be comprised of one or more components.

Facility: A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)

Facility Rating: The maximum or minimum voltage, current, frequency, or real or reactive power flow through a facility that does not violate the applicable equipment rating of any equipment comprising the facility.

Fault: An event occurring on an electric system such as a short circuit, a broken wire, or an intermittent connection.

Firm Transmission Service: The highest qualify (priority) service offered to customers under a fixed rate schedule that anticipates no planned interruption.

Load: An end-use device or customer that receives power from the electric system.

Load Serving Entity (LSE): Secures energy and transmission service (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.

Long-Term Transmission Planning Horizon: Transmission planning period that covers years six through ten or beyond when required to accommodate any known longer lead time projects that may take longer than ten years to complete.

Near-Term Transmission Planning Horizon: The transmission planning period that covers Year One through five.

Network Integration Transmission Service: Service that allows an electric transmission customer to integrate, plan, economically dispatch and regulate its network reserves in a manner comparable to that in which the Transmission Owner serves Native Load customers.

Non-Consequential Load Loss: Non-Interruptible Load loss that does not include: (1) Consequential Load Loss, (2) the response of voltage sensitive Load, or (3) Load that is disconnected from the System by end-user equipment.

Off-Peak: Those hours or other periods defined by NAESB business practices, contract, agreements, or guides as periods of lower electrical demand.

On-Peak: Those hours or other periods defined by NAESB business practices, contract, agreements, or guides as periods of higher electrical demand.

Operating Reserve: That capability above firm system demand required to provide for regulation, load forecasting error, equipment forced and scheduled outages and local area protection. It consists of spinning and non-spinning reserve.

Planning Assessment: Documented evaluation of future Transmission System performance and Corrective Action Plans to remedy identified deficiencies.

Planning Authority: The responsible entity that coordinates and integrates transmission facility and service plans, resource plans and protection systems.

Planning Coordinator: See Planning Authority

Point to Point Transmission Service: The reservation and transmission of capacity and energy on either a firm or non-firm basis from the Point(s) of Receipt to the Point(s) of Delivery.

Protection System:

- Protective relays which respond to electrical quantities,
- Communications systems necessary for correct operation of protective functions
- Voltage and current sensing devices providing inputs to protective relays,
- Station dc supply associated with protective functions (including batteries, battery chargers, and non-battery-based dc supply), and
- Control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.

Resource Planner: The entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority Area.

Special Protection System (SPS) or Remedial Action Scheme: An automatic protection system designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components to maintain system reliability. Such action may include changes in demand, generation (MW and Mvar), or system configuration to maintain system stability, acceptable voltage, or power flows. An SPS does not include (a) underfrequency or undervoltage load shedding or (b) fault conditions that must be isolated or (c) out-of-step relaying (not designed as an integral part of an SPS). Also called Remedial Action Scheme.

Stability: The ability of an electric system to maintain a state of equilibrium during normal and abnormal conditions or disturbances.

System: A combination of generation, transmission, and distribution components.

Transmission: An interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.

Transmission Reliability Margin (TRM): The amount of transmission transfer capability necessary to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change.

Transmission Planner (TP): The entity that develops a long-term (generally one year beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion for the Planning Authority Area.

Year One: The first twelve month period that a Planning Coordinator or a Transmission Planner is responsible for assessing. For an assessment started in a given calendar year, Year One includes the forecasted peak Load period for one of the following two calendar years. For example, if a Planning Assessment was started in 2011, then Year One includes the forecast peak Load period for either 2012 or 2013.

The following are LG&E and KU Transmission Planning Defined Terms used in these Planning Guidelines:

Extreme Event Report: Report of the results for the extreme events studies for TPL-001-4 Table 1 extreme events.

HV: Facilities operated between 100 kV and 300 kV.

5 Models

This section describes the models that are built for compliance with TPL-001-4.

5.1 Normal System Condition Models

Per TPL-001-4 R1, LG&E and KU maintains normal System condition models within its respective area for performing the studies needed to satisfy the requirements of TPL-001-4 Standard. The models use data consistent with that provided in accordance with the MOD-010 and MOD-012 standards, supplemented by other sources as needed, and shall represent projected System conditions. The process for developing the steady state and stability models are described in this section. Normal System condition models shall include:

- Existing Elements¹: model of 69 kV and above lines, transformers, substations etc.
- Known outage (s) of generation or Transmission facilities described in Section 5.2.
- New planned Elements and Facilities and changes to existing Elements and Facilities as described in 5.3.
- Real and reactive forecasted load as described in 5.4.
- Known commitments for Firm Transmission Service and Interchange as described in 5.5.
- Resources (supply or demand side) required for Load

¹ TPL-001-4 1.1.1

The above models represent normal System conditions and must meet the performance requirements of TPL-001-4 Table 1 Category P0.² The applicable Facility Rating for TPL-001-4 Table 1 Category P0 is the seasonal normal rating.

5.2 Known Outages

Known outages in the Near Term of generation or transmission Elements and Facilities with a duration of at least six months will be modeled for the seasons and years in which the outage is scheduled in both the System Peak and Off-Peak models³. Models will be developed, and an assessment of the System with these outages will be completed by analyzing Categories P0 and P1 planning events in Table 1 of TPL-001-4⁴.

Outages lasting longer than six months are supplied by the GO and TO to the PC through the MOD-032 data submittal.

5.3 New planned Elements and Facilities

The steady state and stability models developed will include projects as documented in the previous year's TEP including new planned Elements and Facilities and changes to existing and planned Elements and Facilities.⁵ For both steady state and stability models, projects from the previous year's TEP are included according to the expected in-service dates. In addition, all projects that were completed after the completion of the previous year's TEP will be included in the Base Case Series (BCS) models.

Since the group that performs the functions for the LG&E and KU Transmission Planner (TP) also performs the functions for the LG&E and KU PC, there is no need for a MOD-032 data submittal from TP to PC for new planned Elements and Facilities.

5.4 Real and Reactive Forecasted Load

Load Serving Entities (LSEs) provide delivery point forecast for real power and power factor per the MOD-032 data submittal. The reactive load is calculated with the real power and power factor. The LSE load forecast for network load levels are included in the models.⁶

Load forecasts are typically provided for the following conditions:

² TPL-001-4 R1 ³ TPL-001-4 1.1.2 ⁴ TPL-001-4 2.1.3 ⁵ TPL-001-4 1.1.3 ⁶ TPL-001-4 1.1.4

- Summer and Winter Peak 50/50 peak forecast
- Off-Peak⁷
 - Light Load Lowest loads typically observed in the middle of the night or early morning on a spring day (i.e. Easter morning)
 - Summer Shoulder 70% to 80% of summer peak load

Additional forecasts may be requested on an as needed basis.

5.5 Transmission Service Reservation (TSR)

For both steady state and stability models, firm transmission service reservations that are annual, confirmed, and have a contract period of five or more years may be included⁸ in the models. A list of the TSRs included in the base case models are documented in the TEP report. TSRs that are not included in the models will be evaluated in the sensitivity study discussed in section 6.7.

TSR information is supplied to the LG&E and KU PC from the appropriate RP through the MOD-032 data submittal.

5.6 Real Power Resource Modeling

This section applies to real power resource modeling of units connected to the LG&E and KU transmission system.

The real power resource modeling, for generating units connected to the LG&E and KU transmission system, for steady state and stability models is provided by Generator Owners and/or Resource Planners, and includes capabilities for both On-Peak and Offpeak scenarios⁹. Off-peak scenarios are described in Section 5.4. The generation that is on-line initially comes from a merit order that is also provided to the Transmission Planner by the Resource Planner. Operating Reserves are modeled if sufficient generation is available. The process of modeling Operating Reserves dispatches large units (25 MW or greater) to some value less than their maximum output, so that the sum total of available output for online units meets or exceeds the reserve requirements.

There could be instances where there may not be enough generation resources to cover the load, particularly in the Long-Term Transmission Planning Horizon models. In those instances, the TP may choose to model a future expected generating unit, fictitious

⁷ TPL-001-4 2.1.2 ⁸ TPL-001-4 1.1.5 ⁹ TPL-001-4 1.1.6 generating Facility, or energy imports. The TP will not utilize these options solely to meet Operating Reserves.

Maximum output will be either the value provided by the Generator Owner (GO) in their resource plan or the Network Integrated Transmission Service (NITS) Capacity value posted on the LG&E and KU OASIS plus firm point to point transmission, whichever is lower. Units are dispatched using the Merit Order (MO) provided by the GO.

5.7 Reactive Power Resource Modeling¹⁰

This section applies to reactive power resource modeling of units connected to the LG&E and KU transmission system.

The reactive power resource capability for the steady state and stability models is supplied by the GO and/or RP to the LG&E and KU Planning Coordinator per the MOD-032 data submittal. The transmission level voltage at the power plants will be regulated in the Base case models to the target voltage in Table 1 of the LG&E and KU *Voltage and Reactive Power Schedule (VAR-001)* document. The Voltage and Reactive Power Schedule to the PC from the TOP per the MOD-032 data submittal.

Capacitor banks will be modeled with the actual voltages (or typical settings for future installations) at which the capacitor bank turns on and off for regulating voltage.

5.8 Modeled Facility Ratings

The TP models Facility Ratings as follows:

- Summer Peak 104°F
- Winter Peak 23°F
- Off-Peak 87°F

The LG&E and KU PC has access to the LG&E and KU Transmission Owner Facility Ratings through LOAD database. Generator Owner Facility Ratings are provided to the TP/PC through a MOD-032 data submittal.

5.9 Base Case Series Models

Base case series (BCS) models are developed for Near-Term Transmission Planning Horizon and Long-Term Transmission Planning Horizon for steady state models, where the Near-Term Transmission Planning Horizon are years one through five, and Long-Term Transmission Planning Horizon are years six through ten. Specific models may vary from series to series, and may include one or more models for the years in the Near-Term Transmission Planning Horizon and Long-Term Transmission Planning Horizon.

Each BCS model contains a detailed representation of the LG&E and KU Balancing Authority control area from 69 kV through 500 kV.

Portions of the models outside the LG&E and KU model area are taken from the most recent NERC Eastern Interconnection Reliability Assessment Group (ERAG) Base Case Series. The specific ERAG model used will be the same time-frame as, or a model nearest the time-frame of, the target model being built. LG&E and KU may coordinate models with neighboring TPs, and may alter their Systems in the ERAG models to reflect that coordination.

BCS models will be provided to the ITO for review as soon as available.

The BCS models are the starting point for the annual planning assessment, and are used for TEP development. Stability analysis is not required to be performed on the BCS models, but is performed on TEP models developed later in the Planning Assessment.

5.10 Transmission Expansion Plan (TEP) Models

At the completion of the annual Planning Assessment, TEP projects are identified and timed. A set of TEP models are created for use in future studies with the new TEP projects and retiming of projects. Both steady state and stability TEP models are created. At the completion of the TEP process, the TEP models are delivered to both the Reliability Coordinator (RC) and the ITO

5.11 Steady State Models

Steady State models are developed for winter On-Peak, summer On-Peak and Off-Peak Load conditions. Transmission base cases for steady state analysis are developed on an annual basis to reflect the most current information and assumptions available concerning the modeling of future years' System load level and load distribution (provided by the LSE), generation (provided by the GO) and the previous year's TEP.

Steady state models in the Near-Term Transmission Planning Horizon will include summer and winter On-Peak load models for Year One or year two and year five¹¹; at least one Off-Peak model in the Near-Term Transmission Planning Horizon is developed. Long-term Transmission Planning Horizon On-Peak Load models will generally include year ten only. A year ten model is used since it is expected that the loads will be higher than year six through nine models¹². At least one summer and winter On-Peak load

¹¹ TPL-001-4 2.1.1 ¹² TPL-001-4 2.2.1 model for years six through ten will be included. Other models may be developed to support timing of issues associated with significant construction and/or System changes.

5.12 Stability Models

Stability models are developed using the TEP steady state models which include the most recent projects timings. Dynamic models are developed for summer On-Peak and Off-Peak conditions. At least one On-Peak and one Off-Peak model in the Near-Term Transmission Planning Horizon will be developed. Long-term stability models will be developed to address the impact of proposed material generation additions or changes, if any, in that timeframe. If there are no material generation additions or changes, a stability model in the Long-Term Transmission Planning Horizon will not be built. The TEP will include documentation to support the technical rationale for determining generation material changes¹³. A minimum of at least one stability model with maximized generation, utilizing the generation interconnection capacity (GIC) values, within the LG&E and KU BA will be developed. Other stability models may be developed as necessary. If needed, other stability models will be built to meet the requirements of TPL-001-4 R2.4.3.

The LG&E and KU dynamics parameters are also updated to the latest available data. All new dynamics data will be tested to make sure that a dynamics stability for no fault analysis lasting twenty seconds shows flat line voltages and rotor angles.

The stability models for the TEP are dependent on industry dynamic models (e.g. ERAG) developed annually. The models have roots in the previous year's ERAG steady state models. Although uncommon, it is possible that the current year ERAG models may not be available in time for TEP model development. In this scenario the ERAG dynamic models from the previous year will be utilized for the outside world.

The ERAG stability models are updated within the LG&E and KU BA with the most recent load forecast. Generation levels use merit order and also incorporate Operating Reserves as described in Section 5.6.

The final stability models will match the topology of the steady state models for the LG&E and KU BA. Due to the ERAG Dynamic Model Building process, the outside world may not match between the stability and steady state models.

5.13 Short Circuit Models

LG&E and KU maintains a perpetually updated short circuit model that reflects the current topology of the LG&E and KU Transmission System with Elements and Facilities in their normal status. LG&E and KU participates in the SERC Short Circuit Database Working Group (SCDWG) process in which a SERC regional model is developed

¹³ TPL-001-4 2.5

annually, in accordance with the SCDWG procedure manual. The procedure manual requires cases be developed for the Near-Term Transmission Planning Horizon and Long-Term Transmission Planning Horizon and the SCDWG coordinates its schedules with the SERC Multi-Regional Modeling Working Group (MMWG) process. In conjunction with SCDWG process, LG&E and KU incorporates a reduction of the most recent SCDWG near-term model each year to represent the Transmission Network outside LG&E and KU, and also incorporates a current detailed model of East Kentucky Power Cooperative (EKPC) short circuit model during the annual update.

The current short circuit model is used to perform the annual breaker duty study of the current Transmission System¹⁴. It will be modified as needed to perform other ad hoc studies, including, where appropriate, replacing the outside world model with a reduced SCDWG long-term model.

The short circuit model is limited to one model in the Near-Term Transmission Planning Horizon and one model in the Long-Term Transmission Planning Horizon.

6 Annual Planning Assessment Per TPL-001-4 R2

LG&E and KU conducts an annual Planning Assessment in order to plan the transmission System to meet TPL-001-4. The annual Planning Assessment includes analysis of both the Near-Term Transmission Planning Horizon and Long-Term Transmission Planning Horizon. The Planning Assessment simulates contingencies for steady state, stability analysis, and short circuit studies¹⁵. If there are no material generation additions or changes in the Long-Term Transmission Planning Horizon, a stability study for the Long-Term Transmission Planning Horizon will not be done¹⁶.

6.1 Non-BES Annual Assessment

LG&E and KU defines BES to only include those Facilities operated at 100 kV and above. BES transformers are those transformers with a primary and at least one secondary voltage operated above 100 kV. For purposes of this document, LG&E and KU non-BES elements are elements operated at 69 kV and those transformers whose secondary voltage is operated at 69 kV. An annual planning assessment of the 69 kV Elements is performed for the Near-Term Transmission Planning Horizon as well as the Long-Term Transmission Planning Horizon. The non-BES planning assessment only includes contingencies and performance requirements for P0, P1 and P3 of TPL-001-4 Table 1. Stability analysis as well as P2, P4-P7 and extreme events for steady state is not analyzed on non-BES Elements. Non-BES elements are not monitored for steady state analysis of P2, P4-P7 and extreme events for either stability or steady state assessments.

¹⁴ TPL-001-4 2.3
¹⁵ TPL-001-4 2.3
¹⁶ TPL-001-4 2.5

The non-BES annual Planning Assessment may utilize a qualified past study or a current study to meet the requirements of TPL-001-4 Table 1 P0, P1 and P3. If a qualified past study is used, it must meet the requirements of TPL-001-4 2.6. Material changes in determination of a qualified past study would include substantial changes to the System represented in the study. If a qualified past study is used, the study reports will be included as attachments in the TEP.

6.2 Steady State BES Assessment for the Near-Term Transmission Planning Horizon

The Planning Assessment in the Near-Term Transmission Planning Horizon will include steady state analysis of the BES based on computer simulation of contingency events¹⁷. The study is performed using a computer simulation of planning and extreme events to determine whether the BES meets the performance requirements of TPL-001-4 Table 1¹⁸. The contingency selection for the planning events is discussed in section 7 of this document. The annual Planning Assessment for the Near-Term Transmission Planning Horizon may utilize a qualified past study or a current study to meet the requirements of TPL-001-4. If used, a qualified past study must meet the requirements of TPL-001-4 2.6. Material changes in determination of a qualified past study would include substantial changes to the System represented in the study. If a qualified past study is used, the study reports will be included as attachments in the TEP or Extreme Event Report. The Near-Term Transmission Planning Horizon assessment will simulate P1 through P7 planning events and extreme events for BES Facilities using the performance requirements of TPL-001-4 Table 1¹⁹. In the event that the Contingency analyzed does not meet the respective performance requirements of TPL-001-4 Table 1 P1 through P7, a Corrective Action Plan(s) will be developed to ensure that the System meets the required performance requirements. The Corrective Action Plan(s) are documented in the TEP.

The extreme event analysis for Near-Term Transmission Planning Horizon will use the identification of System instability for conditions such as Cascading, voltage instability, or uncontrolled islanding criteria described in section 9. If the extreme event shows potential for System instability, then an evaluation of possible actions designed to reduce the likelihood or mitigate the consequences is conducted and documented in the Extreme Event Report.

¹⁷ TPL-001-4 R3
¹⁸ TPL-001-4 3.1
¹⁹ TPL-001-4 3.2

6.2.1 Steady State Sensitivity Studies for Near-Term Transmission Planning Horizon

The Near-Term Transmission Planning Horizon portion of the steady state analysis will include an assessment of at least one of the following varying conditions²⁰:

- Real and reactive forecasted Load
- Expected transfers not included in the BCS models
- Expected in service dates of new or modified Transmission Facilities that may or may not have all required approvals.
- Reactive resource capability.
- Generation additions that have not yet completed a large generation interconnection agreement and/or anticipated retirement of generation not yet announced.
- Controllable Loads and Demand Side Management (modeled in selected Off-Peak).
- Duration or timing of known Transmission outages (when outages are known to occur in the Near-Term or Long Term Transmission Planning Horizon).

For the sensitivity portion, the Planning Assessment may utilize a qualified past study or a current study to meet the requirements of TPL-001-4. A qualified past study must meet the requirements of TPL-001-4 2.6. Material changes in determination of a qualified past study would include substantial changes to the System represented in the study. If a qualified past study is used, the study reports will be included in the new TEP. The Near-Term Transmission Planning Horizon steady state analysis sensitivities described above will include P0, P1 and P3 for non-BES Elements. The Near-Term Transmission Planning Horizon steady state analysis sensitivities will include P0 trough P7 and extreme events for BES Facilities. Corrective Action Plan(s) do not need to be developed solely to meet the performance requirements for a single sensitivity study in accordance with Requirements TPL-001-4 2.1.4 and 2.4.3.²¹

6.2.1.1 Study Impacts

Impacts in studies not resulting in Corrective Action Plans, may be identified using the following flow and voltage criteria:

²⁰ TPL-001-4 2.1.4 ²¹ TPL-001-4 2.7

- The flow on a Facility increases by 1% or more when compared to the base case flow
- The voltage on a Facility increases a high voltage violation by 0.5% or decreases a low voltage violation by 0.5% or more when compared to the base case voltage

Studies not resulting in Corrective Action Plans will have the specific criteria used documented in the study report as part of the TEP.

6.2.2 Unavailable Long Lead Item BES Assessment

A list of BES Equipment with a lead time of one year or more will be identified from the appropriate LG&E and KU department. One winter On-Peak and one summer On-Peak model in the Near-Term Transmission Planning Horizon is developed that model the BES transformers out of service that do not have a spare. Example, if there are three BES transformers that do not have spares, then six additional models are developed, one for each of the three transformers out of service for winter and summer. Other equipment with long lead times and no spares will be included if such exist. A steady state assessment is performed on these unavailable spare transformer models for TPL-001-4 Table 1 Categories P0, P1 and P2²². The impact of this possible unavailability on System performance shall be studied as a portion of the Near-Term Transmission Planning Horizon assessment. The result of the assessment of potential unavailable equipment is included in the TEP. Corrective action plans will be developed if necessary.

6.3 Steady State BES Assessment for Long-Term Transmission Planning Horizon

The Planning Assessment in the Long-Term Transmission Planning Horizon will include steady state analysis of the BES based on computer simulation of contingency events²³. The study is performed using a computer simulation of planning and extreme events to determine whether the BES meets the performance requirements of TPL-001-4 Table 1²⁴. The contingency selection for the planning events is discussed is section 7 of this document. ²⁵The annual Planning Assessment for the Long-Term Transmission Planning Horizon may be supported by a current study and supplemented with a qualified past study to meet the performance requirements of TPL-001-4. At least one winter On-Peak and one summer On-Peak steady state models will be developed for the Long-Term Transmission Planning Horizon. These models are used to simulate P1 through P7 planning events and extreme events for BES Facilities using the performance requirements of TPL-001-4 Table 1²⁶. In the event that the Contingency analyzed does not meet the respective performance requirements of TPL-001-4 Table 1 P1 through P7, a

²² TPL-001-4 2.1.5
²³ TPL-001-4 R3
²⁴ TPL-001-4 3.1
²⁵ TPL-001-4 2.2
²⁶ TPL-001-4 3.2

Corrective Action Plan(s) will be developed to ensure that the System meets the required performance requirements. The Corrective Action Plan(s) are documented in the TEP.

The extreme event analysis for Long-Term Transmission Planning Horizon will use the identification of System instability for conditions such as Cascading, voltage instability, or uncontrolled islanding criteria described in section 9. If the extreme event shows potential for System instability, then an evaluation of possible actions designed to reduce the likelihood or mitigate the consequences is conducted and documented in the Extreme Event Report.

6.4 Short Circuit Analysis

The short circuit analysis portion of the Planning Assessment shall be conducted annually utilizing one model in the Near-Term Transmission Planning Horizon and one model in the Long-Term Transmission Planning Horizon²⁷. The short circuit analysis may utilize a qualified past study or a current study to meet the requirements of TPL-001-4. A qualified past study must meet the requirements of TPL-001-4 2.6. Material changes in determination of a qualified past study would include substantial changes to the System represented in the study. If a qualified past study is used, the study reports will be copied in the TEP.

The interrupting requirements of LG&E and KU circuit breakers must remain within circuit breaker interrupting capabilities. LG&E and KU calculates circuit breaker interrupting duty utilizing a recognized industry standard software application for short circuit analysis. The software calculates the breaking currents using procedures recommended by ANSI/IEEE.

Breaker duty studies are performed with all Transmission Facilities, and all generators in service. Studies are performed on the Transmission System in its current topology at least annually, and internal ad hoc studies are performed as necessary to determine short circuit impacts of projects under consideration. For ad hoc studies, the model will be modified to simulate as accurately as possible the Transmission System configuration when the project is expected to go into service.

In service circuit breakers with fault duties in excess of interrupting capabilities will have a TEP project for breaker replacement. The project schedule will follow the rules of TEP project schedule considering lead times necessary to complete breaker replacements. When the scheduled date is beyond the need date for a breaker replacement, the first corrective action tested will be to disable automatic reclosing. If the breaker duty still exceeds the breaker interrupting capability additional corrective action measures will be tested. A corrective action plan which mitigates all criteria violations will be documented in the TEP report. The TEP report will list short circuit study deficiencies and the associated actions needed to achieve the required System performance²⁸. The actions

²⁷ TPL-001-4 2.8 ²⁸ TPL-001-4 2.8.1 will include a list of breaker replacements required so as not to overload the breaker duty rating. The list of breaker replacements will be reviewed in subsequent annual Planning Assessments for continued validity and implementation status of identified System Facilities and Operating Procedures²⁹.

6.5 Near Term Transmission Planning Horizon Stability BES Assessment

Per TPL-001-4 R4, the Near-Term Transmission Planning Horizon Stability Assessment will only be analyzed for BES Facility disturbances. Only BES Facilities will be monitored for the performance requirements of TPL-001-4. The stability assessment will include TPL-001-4 P1 through P7 planning events and extreme events³⁰. For the stability portion of the Planning Assessment, the Near-Term Transmission Planning Horizon may utilize a qualified past study, five calendar years old or less, or a current study to meet the requirements of TPL-001-4³¹. A qualified past study must meet the requirements of TPL-001-4^{2.6}. Material changes in determination of a qualified past study would include substantial changes to the System represented in the study. If a qualified past study is used, the study reports will be copied in the TEP and/or Extreme Event Report. Documentation to support the technical rationale for determining material changes will also be included in the TEP.

TPL-001-4 Table 1 P1 through P7 faults on the near-term models shall be analyzed. The respective performance requirements of P1 through P7 will be used as well as the performance requirements of section 8 in these planning guidelines. Where a fault does not pass the respective performance requirements, a Corrective Action Plan will be developed to ensure the problem is mitigated and therefore meeting the performance requirements. The Corrective Action Plan(s) are documented in the TEP.

Stability analysis will be performed on the following models:

- At least one near-term Off-Peak Load model³²
- At least one near-term On-Peak Load model

These models will represent the expected dynamic behavior of Loads that could impact the study area, considering the behavior of induction motor Loads³³. The model uses an aggregate System Load model which represents the overall dynamic behavior of the Load.

²⁹ TPL-001-4 2.8.2
³⁰ TPL-001-4 4.1 and 4.2
³¹ TPL-001-4 2.4
³² TPL-001-4 2.4.2
³³ TPL-001-4 2.4.1

6.5.1 BES Stability Sensitivity Studies for Near-Term Transmission Planning Horizon

The annual assessment for the Near-Term Transmission Planning Horizon portion of the stability analysis shall be performed for at least one of the following varying conditions³⁴:

- Load level, Load forecast, or dynamic Load model assumptions
- Expected transfers not previously included in the stability models
- Expected in service dates of new or modified Transmission Facilities that may or may not have all required approvals.
- Reduced reactive resource capability.
- Generation additions that have not yet completed a large generation interconnection agreement and/or anticipated retirement of generation not yet announced.

For the sensitivity portion, the Planning Assessment may utilize a qualified past study or a current study to meet the requirements of TPL-001-4. A qualified past study must meet the requirements of TPL-001-4 2.6. Material changes in determination of a qualified past study would include substantial changes to the System represented in the study. If a qualified past study is used, the study reports will be copied in the TEP and/or extreme event report. The near-term stability analysis sensitivity will include P1 trough P7 and extreme events for BES Facilities only. Corrective Action Plan(s) do not need to be developed solely to meet the performance requirements for a single sensitivity study analyzed in accordance with TPL-001-4 2.1.4 and 2.4.1.³⁵ A corrective action plan is required for performance deficiencies identified in multiple sensitivity studies or a rationale for why actions were not necessary will be provided.³⁶

6.6 Stability BES Assessment for the Long-Term Transmission Planning Horizon

Per TPL-001-4 R4 the Long-Term Transmission Planning Horizon Stability Assessment will only be analyzed for BES Facility disturbances. Only BES Facilities will be monitored for the performance requirements of TPL-001-4. If there are proposed material generation additions or changes in the Long-Term Planning Horizon timeframe, the Stability analysis portion of the Long-Term Transmission Planning Horizon will be analyzed on at least one model. If there are no proposed material generation additions or changes in the Long-Term Transmission Planning Horizon will be analyzed on at least one model. If there are no proposed material generation additions or changes in the Long-Term Transmission Planning Horizon, a stability assessment will not

³⁴ TPL-001-4 2.4.3
 ³⁵ TPL-001-4 2.7
 ³⁶ TPL-001-4 2.7.2

be performed in that time frame. The stability assessment may utilize a qualified past study or a current study to meet the requirements of TPL-001-4. A qualified past study must meet the requirements of TPL-001-4 2.6. Material changes in determination of a qualified past study would include substantial changes to the System represented in the study.³⁷ The material changes may or may not include proposed generation that does not have a signed large generation interconnection agreement. The long-term model will include proposed transmission Elements and Facilities. The stability analysis will include TPL-001-4 Table 1 P1-P7 and extreme events. Where analysis does not pass the performance requirements of TPL-001-4 Table 1 P1 through P7, a Corrective Action Plan will be developed to ensure the problem is mitigated meeting the performance requirements. Additionally, extreme event analysis will use the identification of System instability for conditions such as Cascading, voltage instability, or uncontrolled islanding criteria described in section 9. If the extreme event shows a potential for System instability, then an evaluation of possible actions designed to reduce the likelihood or mitigate the consequences is conducted and documented in the Extreme Event Report.

6.7 Other Studies

Sensitivity studies described in sections 6.2.1 and 6.5.1 are performed on models for the Near-Term Transmission Planning Horizon only. There are other studies, described below, performed on both the Near-Term Transmission Planning Horizon and the Long-Tem Transmission Planning Horizon models. Impacts will be identified in these studies through the process described in section 6.2.1.1. The studies could include, but are not limited to:

• TSR Study: Confirmed firm TSRs that were not included at maximum level in the BCS models, are modeled in the appropriate time frame. The TSRs have to be firm and have a contract period of at least one year. This study ensures that these TSRs can be served. Only steady state analysis for P0, P1, P2 EHV only, P3, P4 EHV only planning events is simulated. Corrective Action Plans will be developed for criteria violations identified. This will include operating guides for criteria violations associated with TSRs with a contract period of less than five years.

NITS Capacity: The NITS capacity analysis evaluates the adequacy of the transmission system for P0 (system intact) conditions while modifying generator PMax values to their NITS capacity values. The NITS capacity values are posted on the LG&E and KU OASIS site. When the PMax values are modified, generation is re-dispatched in merit order. Operating reserve requirements are also taken into consideration when possible. Corrective Action Plans will be developed for criteria violations identified.

7 Contingencies

The contingencies of TPL-001-4 Table 1 P1 through P7 and extreme events simulated for the assessment will only include those that are expected to produce more severe System impacts on the LG&E and KU portion of the BES³⁸. The list of Contingencies being simulated is included in appropriate TEP and Extreme Event reports.

Category P1-5, P3-5, P6-4, and P7-2 refer to HVDC outages. There are no HVDC lines within or near the LG&E and KU BA that affect the LG&E and KU System. The Planning Assessment does not evaluate HVDC contingencies and no P1-5, P3-5, P6-4, or P7-2 contingencies are simulated in either the steady state or stability analyses.

7.1 Contingency List Coordination

Per TPL-001-4 3.4.1 and 4.4.1, LG&E and KU Transmission Planner (TP) will coordinate with adjacent Planning Coordinators (PCs) and TPs to ensure that Contingencies on adjacent Systems which may impact the LG&E and KU System are included in the Contingency list. The LG&E and KU BES Contingency list will be shared with the LG&E and KU neighbor TP with a request for the neighbor TP to recommend contingencies in its System that should also be evaluated in the LG&E and KU Planning Assessment. All contingencies recommended by neighboring TPs and/or PCs will be assessed for inclusion in the LG&E and KU Contingency list to be included for evaluation in the LG&E and KU annual Planning Assessment.

7.2 Generation Replacement Scenarios

To maintain the capability to serve native load after loss of a generator, for an LG&E and KU generator owner outage greater than 50 MW, replacement generation shall be simulated from the most restrictive combination of internal resources, Tennessee Valley Authority (TVA), Midcontinent Independent System Operator (MISO) or PJM. Generator contingencies are selected that produce the most severe System impacts on the BES and may be used to limit the number of generator outage and replacement generation scenarios, such as the largest unit per plant, or BES voltage connection point.

For non LG&E and KU owned generator unit outages greater than 50 MW connected to the LG&E and KU transmission system, replacement generation to cover non LG&E and KU load will be simulated from TVA, MISO or PJM whichever is the most restrictive. Generator contingencies are selected that produce the most severe System impacts on the BES and may be used to limit the number of generator outages, such as the largest unit per plant, or BES voltage connection. For non-affiliate generator units, posted as DNRs on OASIS, and not connected to the LG&E and KU transmission system, replacement generation to cover non LG&E and KU load served from the LG&E and KU system will be simulated from other associated DNRs as available, and replacement generation to cover non LG&E and KU load will be simulated from TVA, MISO or PJM whichever is the most restrictive unless customer discussions indicate that some of these scenarios are not needed.. If replacement generation is not available in a specific model, the dispatches will not be simulated.

For generator outages greater than 50 MW and not connected to the LG&E and KU transmission system replacement generation will be simulated from an area on the opposite side of the generating unit area from the LG&E and KU system.. Generator contingencies are selected that produce the most severe System impacts on the BES and may be used to limit the number of generator outages, such as the largest unit per plant, per BES voltage connection.

In addition to LG&E and KU generator unit outages with replacement power as described above, analysis will consider certain dispatch scenarios with replacement from plants simulating maximum output level at the replacement site. Valid scenarios will be outages of single units greater than 200 MW, with replacement power sourced by maximizing the output at either Trimble County or Brown. If the site chosen for replacement power has inadequate available resources (i.e. less than the outaged unit), that particular scenario is not valid. Any excess created by maximizing plant output, after netting with the outaged unit, will be offset by proportionally reducing all other LG&E and KU units not directly involved. Generator contingencies are selected that produce the most severe System impacts on the BES and may be used to limit the number of generator outages, such as the largest unit per plant per BES voltage connection.

7.3 Automatic Control Inclusion

³⁹The simulated contingencies must remove all elements that the Protection System and other automatic controls are expected to disconnect for each Contingency without operator intervention.

The LG&E and KU System does not currently have any Special Protection Systems. Simulations of Protection System responses during a fault or Contingency are analyzed with that Contingency. The LG&E and KU BA does not have any generation tripping or run back scheme other than what would be tripped as a result of clearing a fault. If generation is tripped as a result of fault clearing, then that tripping scheme will be studied as part of the Contingency analyzed.

Per TPL-001-4 3.3.1.1, LG&E and KU will build a project to ensure that generators do not trip due to low voltage on the generator bus after a P1 or P3 planning event. The minimum generator steady state or ride through voltage limit is 0.95 pu at the generator

bus. Tripping of generators will be included in the simulation by running the simulation manually if the screen result indicates the generator bus voltage falls below 0.95 pu for a P2, P4 through P7 and extreme events.

7.3.1 Steady State Automatic Control Inclusion

If the results of the steady state analysis show an overload of Facility (ies), prior to loss of load if allowed by TPL-001-4 Table 1, a verification of the relay loadability values is completed. Verification is done via the CASCADE database or through communication with the Protection department. If the MVA flow on a BES Facility exceeds the relay loadability setting, the steady state simulation will include the outage of that Facility that exceeds the relay loadability setting.

The LG&E and KU transmission System does not contain any phase-shifting transformers. There are switched capacitors on the LG&E and KU transmission System and those facilities are modeled with the voltage levels at which they are switched on and off⁴⁰. Transmission capacitor status (on/off) are simulated consistent with automatic voltage control (on/off) settings and operating practice during normal transmission System conditions. Therefore, when the solution of the power flow analysis has capacitor bank switching enabled, the automatic switching of capacitor banks are simulated.

7.3.2 Stability Assessment Protection System Inclusion

Per TPL-001-4 4.3.1.1 the stability simulation will include successful high speed (less than one second) reclosing and unsuccessful high speed reclosing into a Fault where high speed reclosing is utilized.

Per TPL-001-4 4.3.1.2 the stability simulations will include the tripping of generators where simulations show generator bus voltages or high side of the GSU voltages are less than known or assumed generator low voltage ride through capability. If assumptions are made they will be included in the TEP report.

7.4 Load Restoration and Switching Procedure.

During breaker to breaker outages, some Consequential Load loss is possible. The simulation of the load restoration and switching procedure is performed as part of the Planning Assessment. Post-fault conditions and conditions after load restoration, switching, or transmission reconfiguration should be evaluated. Post-Contingency operator-initiated actions to restore load service are simulated. Post-contingency operator-initiated actions including switching may be simulated to reduce the flow through transformers or increase voltages but not to reduce line flows. Load that is off-

line as a result of the Contingency (consequential load loss) being evaluated may be switched to alternate sources during the restoration assessment, but load is not taken offline to perform switching.

7.5 Steady State Planning Events

The steady state Planning Assessment studies are performed based on a Contingency list created to meet requirements of TPL-001-4 R3. The Contingency list includes those planning events in TPL-001-4 Table 1 that are expected to produce more severe System impacts on its portion of the BES. Since the Contingency list that produces the most severe events may vary year to year of the planning assessment, the Contingency list will be documented in the TEP. This section of the Planning Guidelines will document the methodology used to develop the Contingency list which will produce the most severe System impacts.

The Extreme Event Report will also list those contingencies analyzed and expected to produce more severe System impacts. The extreme event analysis may utilize a qualified past study or a current study to meet the requirements of TPL-001-4. A qualified past study must meet the requirements of TPL-001-4 2.6. Material changes in determination of a qualified past study would include substantial changes to the System represented in the study.

7.5.1 TPL-001-4 Table 1 Category P1 Contingency Selection

TPL-001-4 Table 1 Category P1 is single contingencies including loss of generator, transmission circuit, transformer, or shunt device. The LG&E and KU Planning Assessment includes all single transmission circuits and transformers that are operated at 69 kV (secondary voltage) and above. In order to achieve the removal of all elements that the Protection System and other automatic controls are expected to disconnect for each Contingency without operator intervention all breaker to breaker contingencies for transmission circuits and transformers are simulated for Category P1 events⁴¹. The single generator Contingency (ies), includes single generator units connected to the LG&E and KU System and simulates an outage of the largest generator at each transmission bus. The largest generator at a bus is considered to produce more severe System impacts than smaller units connected to the LG&E and KU System, but that are in close proximity are also simulated by taking the outage of only the largest unit at a plant site.

7.5.2 TPL-001-4 Table 1 Category P2 Contingency Selection

• Opening a line section without a fault: All line section outages of BES Facilities will be simulated to ensure the performance requirements of TPL-001-4 Table 1.

- Bus Section Fault: Many LGE&E/KU BES substations are designed with a breaker and a half or ring bus design. A bus section fault for a ring bus results in the same Contingency as P1, while a bus section fault of a breaker and a half design results in no transmission circuit outage or a P1 outage depending on the location of the bus. Therefore, the only Bus Section Faults analyzed for Category P2 are the BES buses that have a straight bus design. All BES Facilities in a straight bus configuration are simulated for Category P2-2.
- Internal Breaker Fault (non-Bus-tie Breaker): An internal breaker fault means a breaker failing internally, thus creating a System fault which must be cleared by protection on both sides of the breaker. An internal breaker fault on a ring bus design is a double Contingency of the two Facilities that share a breaker in the ring. An internal breaker fault on a breaker in a breaker and a half design, results in a double Contingency of the two Facilities that share a breaker in the same bay. Therefore the internal fault contingencies simulated are those double contingencies for BES Facilities that share a breaker for either a ring bus or breaker and a half design. An internal breaker fault for a breaker on a straight bus will be simulated when the fault causes more than just a disconnected bus, like an internal breaker fault where the breaker protects a three terminal line.
- Internal Breaker Fault (Bus-Tie Breaker): An internal breaker fault means a breaker failing internally, thus creating a System fault which must be cleared by protection on both sides of the breaker. This contingency results in opening all breakers connected to both buses connected by the bus-tie breaker. All of the internal breaker faults for bus-tie breakers are simulated.

7.5.3 TPL-001-4 Table 1 Category P3 Contingency Selection

Category P3 includes the loss of a single generator unit, as described in section 7.5.1, followed by system adjustments. After system adjustments, all P1 contingencies are simulated. This includes generator, transmission circuit, transformer, and shunt device contingencies. For P3 events, LG&E and KU runs all single contingencies of 69 kV and above combined with a generator outage described in section 7.2. LG&E and KU also runs combinations of two generator outages.

7.5.4 TPL-001-4 Table 1 Category P4 Contingency Selection

Category P4 contingencies in steady state are multiple contingencies caused by a stuck breaker or relay failure where backup clearing is required to clear a fault.

7.5.5 TPL-001-4 Table 1 Category P5 Contingency Selection

The contingencies for TPL-001-4 Table 1 Category P5 are simulated after the stability studies are performed. The stability analysis identifies which breakers will open for a category P5 event. The contingency selection is determined by the stability analysis (refer to 2nd paragraph on page 27).

7.5.6 TPL-001-4 Table 1 Category P6 Contingency Selection

The following are criteria for contingencies selected of Category P6 that produce more severe System results or impacts. All tested BES contingencies are analyzed to determine impacts on BES Facilities remaining in-service. When a BES Contingency shows an impact on any BES Facility remaining in-service, that Contingency will be paired with any other BES Contingency that impacts the same in-service BES Facility. Category P6 contingencies include transmission circuit, transformer, and shunt devices. LG&E and KU does not currently have any shunt devices on the BES, but if/when any are installed, they will be added to the contingency list.

The contingencies selected that produce the most severe results in steady state are not always the same as those selected for stability analysis. LG&E and KU's Contingency Selection Criteria describes the rationale for Contingency selection that is consistent with TPL-001-4 R3 and is considered to produce more severe System results or impacts.

7.5.7 TPL-001-4 Table 1 Category P7 Contingency Selection

LG&E and KU maintains a list of adjacent circuits greater than one mile in length that reside on a common structure. Loss of all BES double circuit Facilities that reside on a common structure are simulated for Category P7.

7.6 Steady State Extreme Events

LG&E and KU simulates the System performance for extreme events in TPL-001-4 Table 1 extreme events. The extreme events are selected that are expected to produce more severe System impacts. When LG&E and KU evaluates in steady state the performance of Category P6, there are no System adjustments after the first Contingency. Therefore, the P6 planning event is the same as the extreme event steady state part 1. The extreme events that are simulating in the TPL performance assessment include:

- Loss of a tower line that has three or more BES circuits when the common structure lines are more than one mile in length.
- Loss of all BES transmission lines on a common Right-of-Way when the common right of way is longer than one mile in length.

- Loss of a substation (one BES voltage level plus transformers) which are analyzed in the TEP process. A list of substations selected for this extreme event using will be included in the TEP report.
- Loss of all generating units at a station which is analyzed in the TEP process includes only the largest generation sites greater than 500 MW total generation capability in the LG&E and KU System.
- Loss of a large load or major load center which is analyzed in the TEP process includes tripping the load from the LG&E and KU largest single customers. This also includes large municipal loads.
- Loss of all gas-fired generation (two plants) served by a common large gas pipeline.
- Loss of two large generating stations in close proximity due to severe weather (e.g. tornado)

7.7 Stability Planning Events

The Stability portion of the Planning Assessment shall be performed for planning events to meet performance requirements in TPL-001-4 Table 1. The stability portion of the Planning Assessment will only do analysis of disturbances on BES Facilities. The stability analysis shall use a current or qualified past study per TPL-001-4 2.6.

7.7.1 Category P1 Stability Disturbances Analyzed

Category P1 disturbances are selected to comply with NERC reliability standards including faults on generators, Transmission Circuits, and Transformers. Three phase faults with normal clearing (assumed six cycles) are initially analyzed for breaker to breaker BES Facilities in the stability model. A clearing time of six cycles is a worst case assumed clearing time. In the event that a Category P1 disturbance does not meet the performance requirements of TPL-001-4 Table 1, the Protection group is contacted to acquire the actual clearing time. The disturbance is re-simulated with the actual clearing time.

7.7.2 Categories P2 through P7 Stability Disturbances Analyzed

TPL-001-4 Table 1 Categories P2 through P7 disturbances are selected such that only the disturbances that produce the more severe System results or impacts are analyzed.⁴² Categories P4-P7 stability disturbances may not be analyzed annually. A past study can be used per TPL-001-4 2.6 if there has not been a material change. Material changes in

determination of a qualified past study would include substantial changes to the System represented in the study. When a past study is used, a new study would be required a minimum once every five years.

Opening a line section, generator, transformer or shunt device without a fault: These disturbances are less severe to the BES compared to simulating a fault and then opening the line section, generator, transformer or shunt device in order to clear a fault (P1). The FAC-010 standard requires these contingencies. Therefore, the following will be simulated to accommodate FAC-010 requirements.

- Trip Trimble County #2 without a fault
- Open Trimble Clifty 345 kV line without a fault
- Open one of the Trimble County 345/138 transformers without a fault

Bus Fault Contingency Selection: Bus faults are selected on buses which are generation points of interconnection except those that are interconnected in a breaker and a half design or ring bus design. The breaker and a half and ring bus schemes are designed for more reliable operation of a bus section disturbance. So faults on a breaker and a half scheme and ring bus are considered less severe. Disturbances are analyzed for straight bus designs.

Internal breaker faults: Internal breaker three phase faults are analyzed instead of the less severe single line to ground fault. These are analyzed on breakers considered to be more critical as documented in the TEP. The breaker and a half and ring bus schemes are designed for more reliable operation of a bus section disturbance. So faults on a breaker and a half scheme and ring bus are considered less severe. Therefore, internal breaker faults are analyzed for straight bus designs. Three phase faults are initially analyzed and if performance requirements are not met, then the less severe single line to ground fault is studied. Breakers are selected for internal fault or breaker failure, relay failure disturbances for Categories P2, P4 and P5 which are considered to produce the most severe results or impacts to the reliable operation of the BES.

Category P3 starts with loss of a generator followed by "manual System adjustments" or replacement of the generation by another available source. Then a selected list of worst case BES Category P1 disturbances including breaker to breaker contingencies are analyzed on the generator outage model. The list includes faults one bus away from high side of the BES generators.

Category P4 and P5 Contingency Selection: For Category P4 and P5 three phase faults with a delayed clearing of 20 cycles, or worst case assumption, are analyzed on specific breakers. A more severe three phase fault is initially analyzed. If the three phase fault does not meet the performance requirements for P4 and P5, then the less severe single line to ground fault is analyzed. The stuck breakers selected are those that are expected to produce the most severe System results or impacts. In the event that a three phase fault with delayed clearing fails the performance requirements of TPL-001-4 Table 1, the Protection group is contacted to acquire the actual clearing times. The event is then re-

simulated with the actual clearing times and using a single line to ground fault instead of a three phase fault. This analysis satisfies the requirements of P4, P5 and when required, extreme events. For P5 on a fault plus relay failure to operate, contingencies are selected based on selection criteria from FERC Order 754.

Category P6 Contingency Selection: The n-2 BES contingencies are selected which produce the more severe System impacts of the BES. The rationale used to determine the more severe n-2 contingencies will be documented in the TEP report. The simulation uses a prior outage model followed by manual adjustments. Those manual adjustments can include generation re-dispatch, loss of firm transmission service and non-consequential load loss. Then after these adjustments, three phase faults are analyzed using the same faults as selected for P1 contingencies. The list of prior outages used as the initial condition is documented in the TEP Report.

Category P7 Contingency Selection: LG&E and KU maintains a list of BES transmission lines that are on common towers of greater than one mile in distance. Category P7 disturbances are analyzed by introducing a three phase fault on both lines of the common tower line at the same time with the appropriate clearing time for each line. The normal clearing and reclosing time (if high speed reclosed in less than one second) is simulated. For the common tower P7 disturbance, there are no manual System adjustments after one Contingency. The analysis is performed using two faults occurring at the same time in the stability analysis.

7.8 Stability Extreme Event Assessment

The stability portion of the Planning Assessment will perform studies to assess the impact of the extreme events of TPL-001-4 Table 1⁴³. The events selected for evaluation are those that are expected to produce more severe System impacts. This section describes the rationale for the Contingencies selected for stability extreme events. If the Stability portion of the Planning Assessment for extreme events concludes there is instability (see section 9) caused by the occurrence of extreme events, an evaluation of possible action designed to reduce the likelihood or mitigate the consequences of the event will be conducted. This evaluation will be documented in the Extreme Event Report.

Protection Systems, including planned backup or redundant Systems, are accounted for in the analysis of breaker failure, internal fault of a breaker with delayed clearing contingencies. Redundant protection Systems may be a mitigating project when delayed clearing contingencies do not meet the performance requirements of the reliability standards.

Extreme Event Contingency Selection: Extreme events that are expected to produce more severe System impacts shall be identified. A three phase fault on a generator, transmission circuit, transformer, bus section with a stuck breaker, or relay failure resulting in delayed clearing: These disturbances are analyzed during the analysis for Categories P5 and P6 planning events. If the results of the P5 and P6 analysis do not meet the performance requirements P5 and P6 of TPL-001-4 Table 1, then the less severe single line to ground fault is analyzed. The performance of the three phase fault is then checked for potential instability (see section 9). The stuck breaker list for P5 and P6 contingencies are breakers that are located at BES buses that are also generator points of interconnection at sites with more than 500 MW of total generation capacity. Additionally, other non-generation point interconnection BES buses are included in the stuck breaker selection for Category P5 and P6 disturbances using the stuck breaker contingencies that will produce the more severe System impacts on the BES.

The selection of buses for analysis of the extreme event for a three phase fault on a bus with a stuck breaker analyzes those buses which are a generation point of interconnection except those that are interconnected in a breaker and a half scheme. The breaker and a half scheme is designed for more reliable operation of a bus section disturbance. So faults on a breaker and a half scheme are considered less severe.

The extreme event or three phase internal fault on a breaker is analyzed for the Category P2 less severe planning event using performance requirement for P2 of TPL-001-4 Table 1. If the performance requirements for the planning event are met, no additional work is required, since both the planning and extreme event pass the performance requirements of the planning event. If the extreme event does not pass the performance requirements of the planning event, the less severe single line to ground fault is simulated. The extreme event is then checked for potential instability (see section 9). Breakers are selected for internal fault and breaker failure disturbances, Category P2 which are considered to produce the most severe results or impacts to the reliable operation of the BES. The breakers selected for P2 contingencies are located at BES buses that are also generator points of interconnection at sites with more than 500 MW of total generation capacity. Additionally, other non-generation point of interconnection BES buses are included in the breaker selection for P2 disturbances using bus contingencies that will produce the more severe System impacts on the BES.

8 Performance Requirements

This section documents acceptable System steady state voltage limits, thermal limits, and the transient stability performance requirements for the LG&E and KU System⁴⁴. Additionally performance requirements for P0 through P7 and extreme events described in TPL-001-4 Table 1 are included in the Planning Assessment TEP report.

Specific criteria for P1 planning events will be tested for TPL-001-4 4.1.1; P2 through P7 performance requirements in 4.1.2 and P1 through P7 performance requirements in 4.1.3.

8.1 Special Protection System

The LG&E and KU does not currently own or operate any Special Protection System (SPS) or Remedial Action Scheme in order to comply with the TPL Standards or these Planning Guidelines. Neither SPSs nor remedial action schemes should be considered when developing the Corrective Action Plan(s).

8.2 Steady State Voltage Performance Criteria

Per TPL-001-4 R5, the following is the steady state voltage criteria: A steady state System voltage violation will occur when the percent nominal voltage, rounded to one decimal place, is outside the applicable performance requirements.

The following are detailed voltage criteria for each of the TPL-001-4 Table 1 Categories.

- 1. Category P0 with all Elements and Facilities in service, the LG&E and KU Elements and Facilities of 69 kV and above shall perform within the following:
 - The minimum acceptable voltage criteria for Facilities of 69 kV (load serving buses) and above are 94 percent of their nominal value. The maximum voltage criteria of any 500 kV System bus should not exceed 110 percent of the nominal value. All other transmission Elements and Facilities 69 kV to 345 kV should not exceed 105 percent of the nominal value.
- 2. Category P1and P3 voltage criteria:
 - The minimum acceptable voltage criteria for Elements 69 kV (load serving buses) and above are 90 percent of their nominal value. The maximum voltage criteria of any 500 kV System bus should not exceed 110 percent of the nominal value. All other transmission Elements and Facilities 69 kV to 345 kV should not exceed 105 percent of the nominal value.
 - The minimum generator steady state or ride through voltage limit is 0.95 pu at the generator bus after a P1 or P3 planning event⁴⁵.
 - Load shed using TPL-001-4 footnote 12 is not used as a mitigation for P1 and P3 planning events.
- 3. Category P2, P4 through P7: Additional criteria for P2, P4 through P7 events which limit how much Non-Consequential Load Loss can be shed in order to meet the performance requirements of TPL-001-4 Table 1.
 - Where Non-Consequential Load Loss is allowed in TPL-001-4 Table 1, minimal load shed up to ten percent of the LG&E and KU Balancing Area

load as modeled for P2, and P7 planning events; minimal load shed up to five percent for P4, P5 and P6

- Interruption of Firm Transmission Service when permitted by TPL-001-4 HV.
- After allowed Non-Consequential Load Loss and interruption of Firm Transmission Service, the minimum acceptable voltage criteria for BES Facilities is 90 percent of their nominal value. The maximum voltage criteria of any 500 kV System bus should not exceed 110 percent of the nominal value. All other BES Facilities below 500 kV should not exceed 105 percent of the nominal value.
- Load shed using TPL-001-4 footnote 12 is not used as a mitigation for P2, P4 through P7 planning events.
- 4. Steady state extreme events: Extreme events are only checked against the criteria in section 9.1 of these planning guidelines.

8.2.1 Steady State Thermal Facilities Limits

The applicable Facility Rating for TPL-001-4 Table 1 Category P0 is the seasonal normal Facility Rating. The applicable Facility Rating for TPL-001-4 Table 1 Categories P1 through P7 is the seasonal emergency rating. The recorded circuit flow will be the maximum MVA flow of either end. The recorded transformer flow on two-winding transformers will be the "design output" flow where step-down transformers will be measured at the low-voltage side and System tie transformers will be measured on the side where the MW flow exits the transformer. The loading of GSU transformers and all other equipment attached to and associated with generators are the responsibility of the generator owner; therefore they will not be monitored as part of the transmission planning assessment.

8.3 Transient Stability Performance Requirements

Transient stability studies shall be performed to meet TPL-001-4 Table 1 performance requirements. The System must remain stable per identification of System instability per Section 9 for TPL-001-4 Table 1 Categories P1 through P7 events. It is important to note that this criterion is applied when using an Inductive Motor Load model.

8.3.1 Angular Stability

The angular stability criteria for a generator are defined as: a generator rotor angle must remain less than 180 degrees with respect to the relative angle. LG&E and KU chooses the TVA's Brown Ferry, a nuclear unit, as the relative machine.

8.3.2 Damping Criteria

For TPL-001-4 Table 1 Categories P1-P7 Power Oscillations shall exhibit acceptable damping as established by the Planning Coordinator and Transmission Planner⁴⁶. This damping criteria is: The angular variation of a machine must be tested showing visual damping for a five second run. If the angular variation is not visually damped after the five second run, a 20 second run will be completed. If after the 20 second simulation, the angular variation is still not visually damped, then the System will be determined to be unstable. LG&E and KU examines the stability plots as part of the Stability analysis.

8.3.3 Voltage Ride Through Criteria

Tripping of a generator will be simulated when the generator bus voltages or high side of the GSU voltages are less than known or assumed generator low voltage ride through capability. The acceptable limit of LG&E and KU BA generator tripping is 3500 MW.

8.3.4 TPL-001-4 Table 1 Categories P1 Generator Synchronism

For TPL-001-4 Table 1 Category P1: No generating unit shall pull out of synchronism. A generator being disconnected from the System by fault clearing action or by a Special Protection System (SPS) is not considered to be pulling out of synchronism⁴⁷. LG&E and KU does not currently have an SPS.

8.3.5 TPL-001-4 Table 1 Categories P2-P7 Generator Synchronism

For TPL-001-4 Table 1 Category P2 through P7: Tripping of generating units will be simulated when the analysis indicates that a unit(s) is pulling out of synchronism. The acceptable limit for total (consequential and non-consequential) generation loss is 3500 MW.

8.3.6 TPL-001-4 Table 1 Categories P1 and P3 Transient Voltage Stability Performance Requirements:

Per TPL-001-4 R5, the following is the transient voltage stability criteria for P1 and P3 events: LG&E and KU's transmission System voltage must recover to 0.8 p.u. within 4 seconds after the fault is cleared. Generation that trips as a result of low voltage at the auxiliary load bus described in Section 8.3.3 is not a violation of these criteria unless the criteria in Section 8.3.3 is violated. TPL-001-4 Table 1 Categories P1 and P3 stability faults must also pass the angular and damping stability performance requirements described in this section.

⁴⁶ TPL-001-4 4.1.3 ⁴⁷ TPL-001-4 4.1.1

8.3.7 TPL-001-4 Table 1 Categories P2, and P4-P7 Transient Voltage Stability Performance Requirements:

Per TPL-001-4 R5, the following is the stability voltage criteria for P2 and P4-P7 events: These disturbances are less probable and may involve loss of some non-consequential load (when allowed by TPL-001-4) and/or generation tripping within the LG&E and KU control area. Generation that trips as a result of the low voltage at the auxiliary load bus as described in Section 8.3.3 is not a violation of these criteria unless the criteria in Section 8.3.3 is violated. These disturbances must pass the angular and damping stability performance requirements described in this section. Within 4 seconds after a fault is cleared, there cannot be more than 6 BES buses with voltages less than 0.80 pu.

8.4 Extreme Events Stability Performance Requirements:

Stability disturbances for TPL-001-4 Table 1 extreme events are analyzed for those contingencies that would produce more severe System results or impacts⁴⁸. If the analysis concludes there is potential instability per Section 9, caused by the occurrence of the extreme events, an evaluation of the possible actions designed to reduce the likelihood of or mitigate the consequences and adverse impacts of the event(s) will be conducted.

9 System Instability Criteria Methodology

As required by TPL-001-4 R6 this section defines and documents the criteria or methodology used in the analysis to identify System instability for conditions such as Cascading, voltage instability, or uncontrolled islanding. It is the intent of the Planning Assessment to identify potential System instability before that instability actually occurs giving some margin in the assessment. The identification of potential instability in the power System simulation is different between the steady state study and the stability study.

9.1 Cascading, Voltage Instability, or Uncontrolled Islanding Identification in Steady State Simulations

For steady state power flow analysis, instability could result after one or more of the following occurs:

• Load Loss: Loss of 10% of the LGEE (area 363) load in the appropriate model.

9.2 Instability Identification for Stability or Dynamics Simulations

For purposes of these planning guidelines, instability includes dynamic instability, Cascading, voltage instability, or uncontrolled islanding. For dynamics analysis, instability could result after one or more of the following occurs:

- The event is considered to be uncontrolled if, for a grid event on the LGEE BA, the total non-consequential generation loss is more than one plant located external to the LGEE BA, or if the total (consequential and non-consequential) loss of LGEE BA generation is greater than 3500 MW.
- 4 seconds after a fault is cleared, there exists more than six BES Facilities whose voltages are below 0.8 p.u.
- Violation of damping criteria per section 8.3.1

10 Corrective Action Plan(s)

For planning events shown in TPL-001-4 Table 1, when the analysis indicates an inability of the System to meet the performance requirements in TPL-001-4 Table 1, the Planning Assessment shall include Corrective Action Plan(s) addressing how the performance requirements will be met⁴⁹. Revisions to the Corrective Action Plan(s) are allowed in subsequent Planning Assessments but the planned System shall continue to meet the performance requirements of TPL-001-4 Table 1. Corrective Action Plan(s) do not need to be developed solely to meet the performance requirements for a single sensitivity study analyzed in accordance with TPL-001-4 2.1.4 and 2.4.3⁵⁰. The Corrective Action Plan(s) is documented in the TEP report. ⁵¹The TEP report lists the System deficiencies and the associated actions needed to achieve the required System performance.

Operating Guides may be an acceptable Corrective Action Plan in order to meet the performance requirements if the violation only occurs in the Near-Term Planning Horizon and not in the Long-Term Planning Horizon. Operating guides may include; but not limited to, generation re-dispatch, transmission reconfiguration, Non-Consequential Load Loss, and loss of firm transmission service in accordance with TPL-001-4.

The LG&E and KU Planning Assessment will NOT use Non-Consequential Load Loss when allowed per TPL-001-4 footnote 12 to satisfy the performance requirements of TPL-001-4.

The LG&E and KU BA does not have any automatic generation tripping or run back scheme other than what would be tripped as a result of clearing a fault. If generation is tripped as a result of the fault clearing, then that tripping will be studied as part of the

⁴⁹ TPL-001-4 2.7

⁵¹ TPL-001-4 2.7.1

Contingency analyzed. Automatic generator tripping or automatic generator run-back other than fault clearing should not be considered in the Corrective Action Plan(s).

The LG&E and KU System does have DSM programs, the load forecast supplied by the LSE's contain reductions in load as a result of the DSM programs. Therefore, DSM programs are not utilized in the Corrective Action Plan(s).

The previous TEP's Corrective Action Plan(s) are reviewed in subsequent annual Planning Assessments for continued validity and implementation status of identified of Systems Facilities or improvements to existing Systems Facilities⁵².

10.1.1 Corrective Action Plan(s) for P0

The Corrective Action Plans for TPL-001-4 Table 1 Category P0 can include:

- Building new transmission Elements and Facilities
- Upgrading existing transmission Elements and Facilities

10.1.2 Corrective Action Plan(s) for P1 and P3

For events of TPL-001-4 Table 1 Categories P1 and P3 which require a Corrective Action Plan in order to meet the performance requirements of Table 1, the Corrective Action Plans may include:

- Building new transmission Elements and Facilities
- Upgrading existing transmission Elements and Facilities
- Switching procedures
- Transmission re-configuration

10.1.3 Corrective Action Plan(s) P2, P4 through P7

For events of TPL-001-4 Table 1 Categories P2, P4 through P7 which require a Corrective Action Plan in order to meet the performance requirements of Table 1, the Corrective Action Plans may include:

- Building new transmission Elements and Facilities
- Upgrading existing transmission Elements and Facilities
- Switching procedures (see Section 7.4)
- Generation re-dispatch
- Transmission re-configuration

52 TPL-001-4 2.7.4

• Non-Consequential Load Loss where specifically allowed in TPL-001-4 Table 1. However non-consequential load loss allowed per footnote 12 will not be used in the Corrective Action Plan.

10.2 Project Timing

If situations arise that are beyond the control of the Transmission Planner or Planning Coordinator that prevent the implementation of a Corrective Action Plan in the required timeframe, then the Transmission Planner or Planning Coordinator is permitted to utilize Non-Consequential Load Loss and curtailment of Firm Transmission Service to correct the situation that would normally not be permitted in TPL-001-4 Table 1, provided that the Transmission Planner or Planning Coordinator documents that they are taking actions to resolve the situation. ⁵³ The Transmission Planner or Planning Coordinator shall document the situation causing the problem, alternatives evaluated and the use of Non-Consequential Load Loss and curtailment of Firm Transmission Service.

Operating guides are used to document the mitigation steps when a construction project with a need date in the first year of the Planning Horizon (first year of models) is not expected to be completed on time per TPL-001-4 2.7.3. When necessary, an operating guide could include the use of Non-Consequential Load Loss and curtailment of Firm Transmission Service in accordance with TPL-001-4.

The goal of timing projects is to ensure that the project is completed before the loading reaches 100% of the emergency seasonal rating. Due to varying conditions, this may not be possible. Therefore, utilization of TPL-001-4 2.7.3 may be used in the form of an operating guide when studies indicate there is an overload of 100% or more of the seasonal rating.

All existing projects that are not determined to be under construction are reviewed annually to determine if the current timing should be changed.

For P0, P1 and P3 thermal overload of a Facility, the following criteria will be used to determine the needed timing for the Corrective Active Plan to address the issue:

1. The flow on the Facility must be equal to or exceed 100% of the applicable thermal rating of the Facility at the end of the Long-Term Transmission Planning Horizon without the Corrective Action Plan. An issue that does not equal or exceed 100% of the thermal rating of the Facility in the Long-Term Transmission Planning Horizon is not required to have a Corrective Action Plan with one exception. A facility that is overloaded within the Planning Horizon (Near-Term or Long-Term), but not at the end of the Long-Term Planning Horizon is required to have a Corrective Action Plan in the form of a planning level operating guide. This is applicable to Facilities with flows that decrease through time.

53 TPL-001-4 2.7.3

- 2. Corrective Action Plans for new issues will be timed to the year and season when the flow is equal to or exceeds 98% of the applicable thermal rating of the Facility. The timing of new projects (construction) will not be any earlier than the first model year of the TEP. However, the Corrective Action Plan will contain potential actions, if needed, which can be taken to mitigate the identified constraint in the Planning Horizon prior to the expected completion of construction.
- 3. Existing Corrective Action Plans that had a timing in the previous TEP will be retimed by the following:
 - a. If the flow on the Facility is less than to 96% of the applicable thermal rating for the timing year and season in the previous TEP, the Corrective Action Plan will be retimed to the year and season when the flow is equal to or exceeds 98% of the applicable thermal rating of the Facility.
 - b. If the flow on the Facility is equal to or greater than 100% of the applicable thermal rating prior to the timing year and season in the previous TEP, the Corrective Action Plan will be retimed to the year and season when the flow is equal to or exceeds 98% of the applicable thermal rating of the Facility. The timing of new projects (construction) will not be any earlier than the first model year of the TEP. However, the Corrective Action Plan will contain potential actions, if needed, which can be taken to mitigate the identified constraint in the Planning Horizon prior to the expected completion of construction.
 - c. If the flow on the Facility is equal to or greater than 96% and less than 100% of the applicable thermal rating for the timing year and season in the previous TEP, the timing of the Corrective Action Plan will remain the same as the previous TEP. Facilities that do not exceed the applicable thermal rating in the Long-Term Planning Horizon will have their Corrective Action Plan delayed beyond the Long-Term Planning Horizon.

Voltage performance driven projects will be timed with a need date base on the performance criteria of section 8. There will not be a timing date associated with these projects.

Until January 1, 2021, Corrective Action Plans applying to the following Categories of Contingencies and events identified in the TPL-001-4, Table 1 are allowed to include Non-Consequential Load Loss and curtailment of Firm Transmission Service (in accordance with Requirement R2, Part 2.7.3) that would not otherwise be permitted by the requirement of TPL-001-4:.

- P1-2 (for controlled interruption of electric supply to local network customers connected to or supplied by the Faulted element)
- P1-3 (for controlled interruption of electric supply to local network customers connected to or supplied by the Faulted element)
- P2-1
- P2-2 (above 300 kV)
- P2-3 (above 300 kV)

- P3-1 through P3-5
- P4-1 through P4-5 (above 300 kV)
- P5 (above 300 kV)

11 Responsibility Coordination TPL-001-4 R7

Each PC, in conjunction with the TP, shall determine and identify each entity's individual and joint responsibilities for performing the required studies for the Planning Assessment. LG&E and KU is registered as a PC and TP. LG&E and KU is not a member of a Reliability Transmission Organization (RTO). The LG&E and KU Planning Coordinator area consists only of the LG&E and KU Transmission Owned Facilities. All responsibilities for the studies required by TPL-001-4 and the Planning Assessment are the sole responsibility of the LG&E and KU Transmission Planning group.

The required studies are performed in two parts. Part 1, the TEP uses the study results for planning events (TPL-001-4 Table 1 P0 through P7) and corresponding Corrective Action Plan(s) to demonstrate compliance with TPL-001-4 planning events. The annual planning assessment TEP may utilize a qualified past study when allowed by TPL-001-4 and requirements of TPL-001-4 2.6, are met.

Part 2 is the extreme event report which documents the results of the study for extreme events of TPL-001-4 Table 1. The extreme event report may not be performed annually, and may use a qualified past study as long as the past study for the extreme event analysis is less than five years old and there have been no material changes since the previous past study as discussed in Section 7.5.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 89

Responding Witness: Robert M. Conroy

- Q.1-89. Please provide the most recent Integrated Resource Plan ("IRP) of LGE and KU.
- A.1-89. See the response to AG 1-296.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 90

- Q.1-90. With regard to Mr. Seelye's testimony at 2:6, please explain how an increase in system load (KU +LGE) during an off-peak period in April or October contributes to the need for generation resources.
- A.1-90. An increase in system load during the off-peak period in April or October would not contribute to the need for additional generation resources. Using the LOLP methodology, no production fixed costs would be allocated on the basis of off-peak loads during April and October. However, under the BIP methodology, off-peak loads during April and October would affect the allocation of fixed production costs, particularly base production costs which are allocated based on annual kWh.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 91

- Q.1-91. With regard to Mr. Seelye's testimony beginning at 7:1, please provide a complete set of workpapers, including excel spreadsheets with all formulas intact that support the allocation of the revenue increase shown in Table 1.
- A.1-91. See Schedule M-2.3-E of Section 16(8)(m) of the Filing Requirements and the response to PSC 1-53.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 92

- Q.1-92. With regard to Schedule M-2.3-E, pages 8-10, please provide a proof of revenue/rate design for Rates RTS, TOD-Primary and TOD-Secondary, that reflect the current 75% demand ratchet.
- A.1-92. See Schedule M-2.3-E of Section 16(8)(m) of the Filing Requirements. The billing determinants in this filing are based on forecasted operating results. For the billing determinants for Rates RTS, TODP, and TODS, the current Base Demand Charge is applied to billing demands with the current ratchet and the proposed Base Demand Charge is applied to billing demands with the proposed ratchet.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 93

- Q.1-93. With regard to Mr. Seelye's testimony at 45:9 to 50:7, please provide a calculation of the effective percentage of fixed generation related demand costs that a standby customer that used backup generation for 1 hour during a peak period would pay on Rate RTS and on Rate TOD-P based on the Company's proposal. For example, if the intermediate and peak demand charges represented 100% of generation demand costs and there is a 50% demand ratchet, the customer would pay for 50% of monthly generation demand costs for 11 months and 100% for 1 month.
- A.1-93. See the response to PSC 2-94.

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 94

- Q.1-94. With regard to Schedule M-2.3-E pages 3-24, please provide the support for the Base Demand (100%) billing determinants for Rates TOD-Secondary, TOD-Primary and RTS. Specifically, provide the support for the values from the Pivot table (TAB "Pvt_Tbl") in the excel workpaper "Att_LGE_PSC_1-53 ElecScheduleM_Forecasted" that is used to derive the Base Demand (100%) billing determinants.
- A.1-94. See attached. The attached PDF contains individual customer demand data for each affected rate category for the September 2015 through August 2016 timeframe.

	High-Level Rate		Base Demand @	Base Demand @
Company	Category	Billing Period	75% Ratchet	100% Ratchet
	Description		(kW)	(kW)
LG&E	TODS	2015/09	434	472
LG&E	TODS	2015/10	445	463
LG&E	TODS	2015/11	373	463
LG&E	TODS	2015/12	359	463
LG&E	TODS	2016/01	347	463
LG&E	TODS	2016/02	347	463
LG&E	TODS	2016/03	347	463
LG&E	TODS	2016/04	359	463
LG&E	TODS	2016/05	394	463
LG&E	TODS	2016/06	411	463
LG&E	TODS	2016/07	449	463
LG&E	TODS	2016/08	461	461
LG&E	TODS	2015/09	1,076	1,163
LG&E	TODS	2015/10	1,025	1,116
LG&E	TODS	2015/11	904	1,116
LG&E	TODS	2015/12	950	1,116
LG&E	TODS	2016/01	876	1,116
LG&E	TODS	2016/02	959	1,116
LG&E	TODS	2016/03	978	1,116
LG&E	TODS	2016/04	989	1,116
LG&E	TODS	2016/05	941	1,116
LG&E	TODS	2016/06	976	1,116
LG&E	TODS	2016/07	1,114	1,116
LG&E	TODS	2016/08	1,124	1,124
LG&E	TODP	2015/09	1,847	1,982
LG&E	TODP	2015/10	1,759	1,982
LG&E	TODP	2015/11	1,598	1,982
LG&E	TODP	2015/12	1,532	1,982
LG&E	TODP	2016/01	1,486	1,982
LG&E	TODP	2016/02	1,486	1,982
LG&E	TODP	2016/03	1,486	1,982
LG&E	TODP	2016/04	1,486	1,982
LG&E	TODP	2016/05	1,642	1,982
LG&E	TODP	2016/06	1,714	1,982
LG&E	TODP	2016/07	1,820	1,982
LG&E	TODP	2016/08	1,801	1,847
LG&E	TODP	2016/06	307	307
LG&E	TODP	2016/07	318	318
LG&E	TODP	2016/08	331	331
LG&E	TODS	2015/09	397	475
LG&E	TODS	2015/10	400	475
LG&E	TODS	2015/11	381	475
LG&E	TODS	2015/12	371	475

	High-Level Rate		Base Demand @	Base Demand @
Company	Category	Billing Period		100% Ratchet
	Description		(kW)	(kW)
LG&E	TODS	2016/01	356	475
LG&E	TODS	2016/02	356	475
LG&E	TODS	2016/03	381	475
LG&E	TODS	2016/04	359	475
LG&E	TODS	2016/05	397	475
LG&E	TODS	2016/06	419	475
LG&E	TODS	2016/07	440	475
LG&E	TODS	2016/08	443	475
LG&E	TODS	2015/09	437	485
LG&E	TODS	2015/10	431	485
LG&E	TODS	2015/11	389	485
LG&E	TODS	2015/12	378	485
LG&E	TODS	2016/01	383	485
LG&E	TODS	2016/02	403	485
LG&E	TODS	2016/03	364	485
LG&E	TODS	2016/04	364	485
LG&E	TODS	2016/05	399	485
LG&E	TODS	2016/06	437	485
LG&E	TODS	2016/07	463	485
LG&E	TODS	2016/08	467	467
LG&E	TODS	2015/09	346	400
LG&E	TODS	2015/10	304	400
LG&E	TODS	2015/11	300	400
LG&E	TODS	2015/12	326	400
LG&E	TODS	2016/01	305	400
LG&E	TODS	2016/02	300	400
LG&E	TODS	2016/03	301	400
LG&E	TODS	2016/04	327	400
LG&E	TODS	2016/05	368	400
LG&E	TODS	2016/06	340	400
LG&E	TODS	2016/07	339	400
LG&E	TODS	2016/08	334	400
LG&E	TODS	2015/09	345	371
LG&E	TODS	2015/10	304	371
LG&E	TODS	2015/11	282	371
LG&E	TODS	2015/12	278	371
LG&E	TODS	2016/01	278	371
LG&E	TODS	2016/02	278	371
LG&E	TODS	2016/03	278	371
LG&E	TODS	2016/04	278	371
LG&E	TODS	2016/05	284	371
LG&E	TODS	2016/06	383	383
LG&E	TODS	2016/07	372	383

Company	High-Level Rate Category	Billing Period	Base Demand @ 75% Ratchet	Base Demand @ 100% Ratchet
	Description		(kW)	(kW)
LG&E	TODS	2016/08	342	383
LG&E	TODP	2015/09	900	934
LG&E	TODP	2015/10	855	934
LG&E	TODP	2015/11	783	934
LG&E	TODP	2015/12	720	934
LG&E	TODP	2016/01	769	934
LG&E	TODP	2016/02	706	934
LG&E	TODP	2016/03	747	934
LG&E	TODP	2016/04	798	934
LG&E	TODP	2016/05	864	934
LG&E	TODP	2016/06	933	934
LG&E	TODP	2016/07	944	944
LG&E	TODP	2016/08	1,014	1,014
LG&E	TODP	2015/09	943	1,022
LG&E	TODP	2015/10	830	1,022
LG&E	TODP	2015/11	766	1,022
LG&E	TODP	2015/12	766	1,022
LG&E	TODP	2016/01	766	1,022
LG&E	TODP	2016/02	766	1,022
LG&E	TODP	2016/03	766	1,022
LG&E	TODP	2016/04	766	1,022
LG&E	TODP	2016/05	766	1,022
LG&E	TODP	2016/06	851	1,022
LG&E	TODP	2016/07	891	1,022
LG&E	TODP	2016/08	912	943
LG&E	RTS	2015/09	13,516	18,021
LG&E	RTS	2015/10	13,516	18,021
LG&E	RTS	2015/11	13,516	18,021
LG&E	RTS	2015/12	13,516	18,021
LG&E	RTS	2016/01	16,858	18,021
LG&E	RTS	2016/02	14,820	18,021
LG&E	RTS	2016/03	15,549	18,021
LG&E	RTS	2016/04	15,057	16,858
LG&E	RTS	2016/05	15,377	16,858
LG&E	RTS	2016/06	15,931	16,858
LG&E	RTS	2016/07	12,644	16,858
LG&E	RTS	2016/08	12,644	16,858
LG&E	TODP	2015/09	984	1,018
LG&E	TODP	2015/10	1,192	1,192
LG&E	TODP	2015/11	937	1,192
LG&E	TODP	2015/12	1,378	1,378
LG&E	TODP	2016/01	1,319	1,378
LG&E	TODP	2016/02	1,333	1,378

Company	High-Level Rate Category	Billing Period	Base Demand @ 75% Ratchet	Base Demand @ 100% Ratchet
	Description		(kW)	(kW)
LG&E	TODP	2016/03	1,034	1,378
LG&E	TODP	2016/04	1,110	1,378
LG&E	TODP	2016/05	1,306	1,378
LG&E	TODP	2016/06	1,318	1,378
LG&E	TODP	2016/07	1,800	1,800
LG&E	TODS	2015/09	315	340
LG&E	TODS	2015/10	309	340
LG&E	TODS	2015/11	290	340
LG&E	TODS	2015/12	282	340
LG&E	TODS	2016/01	277	340
LG&E	TODS	2016/02	315	340
LG&E	TODS	2016/03	311	340
LG&E	TODS	2016/04	281	340
LG&E	TODS	2016/05	284	340
LG&E	TODS	2016/06	306	340
LG&E	TODS	2016/07	326	340
LG&E	TODS	2016/08	336	336
LG&E	TODP	2015/09	15,091	17,437
LG&E	TODP	2015/10	13,601	17,437
LG&E	TODP	2015/11	13,078	17,437
LG&E	TODP	2015/12	13,078	17,437
LG&E	TODP	2016/01	13,078	17,437
LG&E	TODP	2016/02	13,078	17,437
LG&E	TODP	2016/03	13,078	17,437
LG&E	TODP	2016/04	13,078	17,437
LG&E	TODP	2016/05	13,513	17,437
LG&E	TODP	2016/06	18,997	18,997
LG&E	TODP	2016/07	18,251	18,997
LG&E	TODP	2016/08	17,485	18,997
LG&E	TODS	2015/09	658	877
LG&E	TODS	2015/10	658	877
LG&E	TODS	2015/11	698	877
LG&E	TODS	2015/12	658	877
LG&E	TODS	2016/01	823	877
LG&E	TODS	2016/02	710	877
LG&E	TODS	2016/03	767	877
LG&E	TODS	2016/04	658	877
LG&E	TODS	2016/05	658	877
LG&E	TODS	2016/06	658	877
LG&E	TODS	2016/07	700	823
LG&E	TODS	2016/08	650	823
LG&E	TODS	2015/09	318	339
LG&E	TODS	2015/10	300	339

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/11	273	339
LG&E	TODS	2015/12	254	339
LG&E	TODS	2016/01	254	339
LG&E	TODS	2016/02	254	339
LG&E	TODS	2016/03	254	339
LG&E	TODS	2016/04	254	339
LG&E	TODS	2016/05	274	339
LG&E	TODS	2016/06	302	339
LG&E	TODS	2016/07	334	339
LG&E	TODS	2016/08	331	334
LG&E	TODS	2015/09	557	563
LG&E	TODS	2015/10	515	563
LG&E	TODS	2015/11	467	563
LG&E	TODS	2015/12	422	563
LG&E	TODS	2016/01	453	563
LG&E	TODS	2016/02	422	563
LG&E	TODS	2016/03	422	563
LG&E	TODS	2016/04	476	563
LG&E	TODS	2016/05	490	563
LG&E	TODS	2016/06	574	574
LG&E	TODS	2016/07	588	588
LG&E	TODS	2016/08	601	601
LG&E	TODS	2016/06	466	520
LG&E	TODS	2016/07	504	520
LG&E	TODS	2016/08	514	520
LG&E	TODS	2015/09	1,397	1,555
LG&E	TODS	2015/10	1,553	1,555
LG&E	TODS	2015/11	1,397	1,555
LG&E	TODS	2015/12	1,188	1,555
LG&E	TODS	2016/01	1,167	1,555
LG&E	TODS	2016/02	1,229	1,555
LG&E	TODS	2016/03	1,227	1,555
LG&E	TODS	2016/04	1,176	1,555
LG&E	TODS	2016/05	1,222	1,555
LG&E	TODS	2016/06	1,238	1,555
LG&E	TODS	2016/07	1,391	1,555
LG&E	TODS	2016/08	1,398	1,553
LG&E	TODS	2015/09	523	541
LG&E	TODS	2015/10	518	541
LG&E	TODS	2015/11	406	541
LG&E	TODS	2015/12	406	541
LG&E	TODS	2016/01	406	541
LG&E	TODS	2016/02	406	541

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/03	406	541
LG&E	TODS	2016/04	406	541
LG&E	TODS	2016/05	514	541
LG&E	TODS	2016/06	515	541
LG&E	TODS	2016/07	547	547
LG&E	TODS	2016/08	563	563
LG&E	TODS	2015/09	363	421
LG&E	TODS	2015/10	316	421
LG&E	TODS	2015/11	316	421
LG&E	TODS	2015/12	316	421
LG&E	TODS	2016/01	316	421
LG&E	TODS	2016/02	316	421
LG&E	TODS	2016/03	316	421
LG&E	TODS	2016/04	316	421
LG&E	TODS	2016/05	316	421
LG&E	TODS	2016/06	373	421
LG&E	TODS	2016/07	411	421
LG&E	TODS	2016/08	411	411
LG&E	TODS	2015/09	1,000	1,019
LG&E	TODS	2015/10	826	1,019
LG&E	TODS	2015/11	764	1,019
LG&E	TODS	2015/12	764	1,019
LG&E	TODS	2016/01	764	1,019
LG&E	TODS	2016/02	764	1,019
LG&E	TODS	2016/03	764	1,019
LG&E	TODS	2016/04	891	1,019
LG&E	TODS	2016/05	877	1,019
LG&E	TODS	2016/06	987	1,019
LG&E	TODS	2016/07	1,046	1,046
LG&E	TODS	2016/08	1,054	1,054
LG&E	TODS	2015/09	1,176	1,206
LG&E	TODS	2015/10	1,170	1,206
LG&E	TODS	2015/11	1,112	1,206
LG&E	TODS	2015/12	1,082	1,206
LG&E	TODS	2016/01	1,043	1,206
LG&E	TODS	2016/02	1,011	1,206
LG&E	TODS	2016/03	1,015	1,206
LG&E	TODS	2016/04	1,092	1,206
LG&E	TODS	2016/05	1,091	1,206
LG&E	TODS	2016/06	1,111	1,206
LG&E	TODS	2016/07	1,234	1,234
LG&E	TODS	2016/08	1,207	1,234
LG&E	TODS	2015/09	438	443

	High-Level Rate		Base Demand @	Base Demand @
Company	Category	Billing Period	75% Ratchet	100% Ratchet
	Description		(kW)	(kW)
LG&E	TODS	2015/10	440	443
LG&E	TODS	2015/11	413	443
LG&E	TODS	2015/12	408	443
LG&E	TODS	2016/01	402	443
LG&E	TODS	2016/02	397	443
LG&E	TODS	2016/03	403	443
LG&E	TODS	2016/04	410	443
LG&E	TODS	2016/05	434	443
LG&E	TODS	2016/06	664	664
LG&E	TODS	2016/07	674	674
LG&E	TODS	2016/08	651	674
LG&E	TODS	2015/09	874	874
LG&E	TODS	2015/10	867	874
LG&E	TODS	2015/11	845	874
LG&E	TODS	2015/12	828	874
LG&E	TODS	2016/01	816	874
LG&E	TODS	2016/02	825	874
LG&E	TODS	2016/03	824	874
LG&E	TODS	2016/04	830	874
LG&E	TODS	2016/05	817	874
LG&E	TODS	2016/06	845	874
LG&E	TODS	2016/07	876	876
LG&E	TODS	2016/08	877	877
LG&E	TODS	2015/09	1,998	2,028
LG&E	TODS	2015/10	1,914	2,028
LG&E	TODS	2015/11	1,521	2,028
LG&E	TODS	2015/12	1,521	2,028
LG&E	TODS	2016/01	1,521	2,028
LG&E	TODS	2016/02	1,652	2,028
LG&E	TODS	2016/03	1,809	2,028
LG&E	TODS	2016/04	1,521	2,028
LG&E	TODS	2016/05	1,541	2,028
LG&E	TODS	2016/06	1,695	2,028
LG&E	TODS	2016/07	1,952	2,028
LG&E	TODS	2016/08	2,056	2,056
LG&E	TODS	2015/09	1,912	1,917
LG&E	TODS	2015/10	1,739	1,917
LG&E	TODS	2015/11	1,835	1,917
LG&E	TODS	2015/12	1,678	1,917
LG&E	TODS	2016/01	1,803	1,917
LG&E	TODS	2016/02	1,521	1,917
LG&E	TODS	2016/03	1,437	1,917
LG&E	TODS	2016/04	1,434	1,912

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	1,629	1,912
LG&E	TODS	2016/06	1,434	1,912
LG&E	TODS	2016/07	1,434	1,912
LG&E	TODS	2016/08	1,590	1,912
LG&E	TODS	2015/09	1,842	2,024
LG&E	TODS	2015/10	1,741	1,933
LG&E	TODS	2015/11	1,637	1,933
LG&E	TODS	2015/12	1,531	1,933
LG&E	TODS	2016/01	1,475	1,933
LG&E	TODS	2016/02	1,509	1,933
LG&E	TODS	2016/03	1,504	1,933
LG&E	TODS	2016/04	1,527	1,933
LG&E	TODS	2016/05	1,567	1,933
LG&E	TODS	2016/06	1,707	1,933
LG&E	TODS	2016/07	1,918	1,933
LG&E	TODS	2016/08	1,908	1,918
LG&E	TODS	2015/09	437	441
LG&E	TODS	2015/10	437	441
LG&E	TODS	2015/11	378	441
LG&E	TODS	2015/12	334	441
LG&E	TODS	2016/01	334	441
LG&E	TODS	2016/02	344	441
LG&E	TODS	2016/03	347	441
LG&E	TODS	2016/04	363	441
LG&E	TODS	2016/05	418	441
LG&E	TODS	2016/06	439	441
LG&E	TODS	2016/07	474	474
LG&E	TODS	2016/08	467	474
LG&E	TODS	2015/09	928	1,237
LG&E	TODS	2015/10	928	1,237
LG&E	TODS	2015/11	928	1,237
LG&E	TODS	2015/12	928	1,237
LG&E	TODS	2016/01	928	1,237
LG&E	TODS	2016/02	928	1,237
LG&E	TODS	2016/03	928	1,237
LG&E	TODS	2016/04	928	1,237
LG&E	TODS	2016/05	821	826
LG&E	TODS	2016/06	848	848
LG&E	TODS	2016/07	842	848
LG&E	TODS	2016/08	792	848
LG&E	TODS	2010/08	910	910
LG&E	TODS	2015/09	683	910
LG&E	TODS	2013/10 2015/11	683	910
LOCL	1003	2013/11	005	510

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	683	910
LG&E	TODS	2016/01	683	910
LG&E	TODS	2016/02	683	910
LG&E	TODS	2016/03	683	910
LG&E	TODS	2016/04	683	910
LG&E	TODS	2016/05	683	910
LG&E	TODS	2016/06	683	910
LG&E	TODS	2016/07	683	910
LG&E	TODS	2016/08	683	910
LG&E	TODS	2015/09	883	883
LG&E	TODS	2015/10	662	883
LG&E	TODS	2015/11	662	883
LG&E	TODS	2015/12	662	883
LG&E	TODS	2016/01	662	883
LG&E	TODS	2016/02	662	883
LG&E	TODS	2016/03	662	883
LG&E	TODS	2016/04	904	904
LG&E	TODS	2016/05	678	904
LG&E	TODS	2016/06	829	904
LG&E	TODS	2016/07	678	904
LG&E	TODS	2016/08	678	904
LG&E	TODS	2015/09	1,019	1,358
LG&E	TODS	2015/10	1,019	1,358
LG&E	TODS	2015/11	1,019	1,358
LG&E	TODS	2015/12	1,019	1,358
LG&E	TODS	2016/01	1,019	1,358
LG&E	TODS	2016/02	1,019	1,358
LG&E	TODS	2016/03	1,019	1,358
LG&E	TODS	2016/04	1,019	1,358
LG&E	TODS	2016/05	874	885
LG&E	TODS	2016/06	904	904
LG&E	TODS	2016/07	1,480	1,480
LG&E	TODS	2016/08	1,110	1,480
LG&E	TODS	2015/09	254	338
LG&E	TODS	2015/10	250	305
LG&E	TODS	2015/11	250	267
LG&E	TODS	2015/12	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODP	2015/09	5,924	6,059
LG&E	TODP	2015/10	5,230	6,059
LG&E	TODP	2015/11	5,328	6,059
LG&E	TODP	2015/12	4,593	6,059

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/01	4,544	6,059
LG&E	TODP	2016/02	4,544	6,059
LG&E	TODP	2016/03	4,544	6,059
LG&E	TODP	2016/04	4,544	6,059
LG&E	TODP	2016/05	5,069	6,059
LG&E	TODP	2016/06	5,752	6,059
LG&E	TODP	2016/07	5,625	6,059
LG&E	TODP	2016/08	5,801	5,924
LG&E	TODP	2015/09	2,161	2,260
LG&E	TODP	2015/10	1,935	2,260
LG&E	TODP	2015/11	1,853	2,260
LG&E	TODP	2015/12	1,714	2,260
LG&E	TODP	2016/01	1,708	2,260
LG&E	TODP	2016/02	1,739	2,260
LG&E	TODP	2016/03	1,773	2,260
LG&E	TODP	2016/04	1,738	2,260
LG&E	TODP	2016/05	1,996	2,260
LG&E	TODP	2016/06	2,206	2,260
LG&E	TODP	2016/07	2,321	2,321
LG&E	TODP	2016/08	2,252	2,321
LG&E	TODS	2015/09	1,876	2,260
LG&E	TODS	2015/10	1,861	2,260
LG&E	TODS	2015/11	1,809	2,260
LG&E	TODS	2015/12	1,946	2,260
LG&E	TODS	2016/01	1,942	2,260
LG&E	TODS	2016/02	2,164	2,260
LG&E	TODS	2016/03	2,062	2,164
LG&E	TODS	2016/04	1,842	2,164
LG&E	TODS	2016/05	1,800	2,164
LG&E	TODS	2016/06	1,849	2,164
LG&E	TODS	2016/07	1,986	2,164
LG&E	TODS	2016/08	1,944	2,164
LG&E	TODS	2015/09	979	1,100
LG&E	TODS	2015/10	893	1,100
LG&E	TODS	2015/11	885	1,100
LG&E	TODS	2015/12	862	1,100
LG&E	TODS	2016/01	874	1,100
LG&E	TODS	2016/02	825	1,100
LG&E	TODS	2016/03	869	1,100
LG&E	TODS	2016/04	845	1,100
LG&E	TODS	2016/05	893	1,100
LG&E	TODS	2016/06	907	1,100
LG&E	TODS	2016/07	926	1,100

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/08	982	1,100
LG&E	TODP	2015/09	904	1,205
LG&E	TODP	2015/10	904	1,205
LG&E	TODP	2015/11	904	1,205
LG&E	TODP	2015/12	904	1,205
LG&E	TODP	2016/01	904	1,205
LG&E	TODP	2016/02	904	1,205
LG&E	TODP	2016/03	904	1,205
LG&E	TODP	2016/04	904	1,205
LG&E	TODP	2016/05	1,197	1,205
LG&E	TODP	2016/06	898	1,197
LG&E	TODP	2016/07	898	1,197
LG&E	TODP	2016/08	1,078	1,197
LG&E	TODS	2015/09	1,219	1,318
LG&E	TODS	2015/10	1,230	1,256
LG&E	TODS	2015/11	1,176	1,256
LG&E	TODS	2015/12	1,141	1,256
LG&E	TODS	2016/01	1,045	1,256
LG&E	TODS	2016/02	942	1,256
LG&E	TODS	2016/03	1,019	1,256
LG&E	TODS	2016/04	1,152	1,256
LG&E	TODS	2016/05	1,214	1,256
LG&E	TODS	2016/06	1,208	1,256
LG&E	TODS	2016/07	1,246	1,246
LG&E	TODS	2016/08	1,291	1,291
LG&E	TODP	2015/09	1,686	1,942
LG&E	TODP	2015/10	1,639	1,868
LG&E	TODP	2015/11	1,539	1,868
LG&E	TODP	2015/12	1,412	1,868
LG&E	TODP	2016/01	1,503	1,868
LG&E	TODP	2016/02	1,440	1,868
LG&E	TODP	2016/03	1,603	1,868
LG&E	TODP	2016/04	1,603	1,868
LG&E	TODP	2016/05	1,509	1,868
LG&E	TODP	2016/06	1,642	1,868
LG&E	TODP	2016/07	1,579	1,868
LG&E	TODP	2016/08	1,677	1,686
LG&E	TODS	2015/09	300	310
LG&E	TODS	2015/10	295	310
LG&E	TODS	2015/11	310	310
LG&E	TODS	2015/12	258	310
LG&E	TODS	2016/01	262	310
LG&E	TODS	2016/02	274	310

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/03	266	310
LG&E	TODS	2016/04	250	310
LG&E	TODS	2016/05	278	310
LG&E	TODS	2016/06	287	310
LG&E	TODS	2016/07	308	310
LG&E	TODS	2016/08	298	310
LG&E	TODS	2015/09	250	333
LG&E	TODS	2015/10	250	333
LG&E	TODS	2015/11	250	333
LG&E	TODS	2015/12	318	333
LG&E	TODS	2016/01	325	333
LG&E	TODS	2016/02	250	333
LG&E	TODS	2016/03	251	330
LG&E	TODS	2016/04	256	325
LG&E	TODS	2016/05	250	325
LG&E	TODS	2016/06	304	325
LG&E	TODS	2016/07	250	325
LG&E	TODS	2016/08	250	325
LG&E	TODS	2015/09	687	790
LG&E	TODS	2015/10	680	790
LG&E	TODS	2015/11	691	790
LG&E	TODS	2015/12	699	790
LG&E	TODS	2016/01	637	790
LG&E	TODS	2016/02	699	790
LG&E	TODS	2016/03	653	790
LG&E	TODS	2016/04	680	790
LG&E	TODS	2016/05	664	790
LG&E	TODS	2016/06	714	790
LG&E	TODS	2016/07	737	790
LG&E	TODS	2016/08	699	790
LG&E	TODS	2015/09	368	404
LG&E	TODS	2015/10	331	390
LG&E	TODS	2015/11	316	390
LG&E	TODS	2015/12	293	390
LG&E	TODS	2016/01	293	390
LG&E	TODS	2016/02	293	390
LG&E	TODS	2016/03	313	390
LG&E	TODS	2016/04	293	390
LG&E	TODS	2016/05	353	390
LG&E	TODS	2016/06	380	390
LG&E	TODS	2016/07	360	390
LG&E	TODS	2016/08	361	380
LG&E	TODS	2015/09	1,707	1,791

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/10	1,624	1,791
LG&E	TODS	2015/11	1,632	1,791
LG&E	TODS	2015/12	1,586	1,791
LG&E	TODS	2016/01	1,540	1,791
LG&E	TODS	2016/02	1,469	1,791
LG&E	TODS	2016/03	1,576	1,791
LG&E	TODS	2016/04	1,526	1,791
LG&E	TODS	2016/05	1,503	1,791
LG&E	TODS	2016/06	1,574	1,791
LG&E	TODS	2016/07	1,676	1,791
LG&E	TODS	2016/08	1,670	1,707
LG&E	TODS	2015/09	817	906
LG&E	TODS	2015/10	888	894
LG&E	TODS	2015/11	815	894
LG&E	TODS	2015/12	685	894
LG&E	TODS	2016/01	723	894
LG&E	TODS	2016/02	755	894
LG&E	TODS	2016/03	768	894
LG&E	TODS	2016/04	806	894
LG&E	TODS	2016/05	758	894
LG&E	TODS	2016/06	847	894
LG&E	TODS	2016/07	843	888
LG&E	TODS	2016/08	755	888
LG&E	TODS	2015/09	352	469
LG&E	TODS	2015/10	372	469
LG&E	TODS	2015/11	383	469
LG&E	TODS	2015/12	419	469
LG&E	TODS	2016/01	352	469
LG&E	TODS	2016/02	464	469
LG&E	TODS	2016/03	348	464
LG&E	TODS	2016/04	348	464
LG&E	TODS	2016/05	348	464
LG&E	TODS	2016/06	348	464
LG&E	TODS	2016/07	358	464
LG&E	TODS	2016/08	348	464
LG&E	TODS	2015/09	650	680
LG&E	TODS	2015/10	579	680
LG&E	TODS	2015/11	528	680
LG&E	TODS	2015/12	510	680
LG&E	TODS	2016/01	510	680
LG&E	TODS	2016/02	510	680
LG&E	TODS	2016/03	510	680
LG&E	TODS	2016/04	510	680

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	587	680
LG&E	TODS	2016/06	597	680
LG&E	TODS	2016/07	674	680
LG&E	TODS	2016/08	706	706
LG&E	TODS	2015/09	442	453
LG&E	TODS	2015/10	405	453
LG&E	TODS	2015/11	357	453
LG&E	TODS	2015/12	340	453
LG&E	TODS	2016/01	349	453
LG&E	TODS	2016/02	340	453
LG&E	TODS	2016/03	340	453
LG&E	TODS	2016/04	363	453
LG&E	TODS	2016/05	361	453
LG&E	TODS	2016/06	421	453
LG&E	TODS	2016/07	461	461
LG&E	TODS	2016/08	449	461
LG&E	TODS	2015/09	385	500
LG&E	TODS	2015/10	394	500
LG&E	TODS	2015/11	385	500
LG&E	TODS	2015/12	375	500
LG&E	TODS	2016/01	375	500
LG&E	TODS	2016/02	375	500
LG&E	TODS	2016/03	375	500
LG&E	TODS	2016/04	375	500
LG&E	TODS	2016/05	375	500
LG&E	TODS	2016/06	375	500
LG&E	TODS	2016/07	392	500
LG&E	TODS	2016/08	383	500
LG&E	TODS	2015/09	282	371
LG&E	TODS	2015/10	324	371
LG&E	TODS	2015/11	325	371
LG&E	TODS	2015/12	282	371
LG&E	TODS	2016/01	306	371
LG&E	TODS	2016/02	312	371
LG&E	TODS	2016/03	303	371
LG&E	TODS	2016/04	278	371
LG&E	TODS	2016/05	278	371
LG&E	TODS	2016/06	278	371
LG&E	TODS	2016/07	323	325
LG&E	TODS	2016/08	301	325
LG&E	TODS	2015/09	520	654
LG&E	TODS	2015/10	503	644
LG&E	TODS	2015/11	483	644

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	477	636
LG&E	TODS	2016/01	467	623
LG&E	TODS	2016/02	467	623
LG&E	TODS	2016/03	467	623
LG&E	TODS	2016/04	467	623
LG&E	TODS	2016/05	467	623
LG&E	TODS	2016/06	467	623
LG&E	TODS	2016/07	390	520
LG&E	TODS	2016/08	390	520
LG&E	TODS	2015/09	822	864
LG&E	TODS	2015/10	787	864
LG&E	TODS	2015/11	732	864
LG&E	TODS	2015/12	684	864
LG&E	TODS	2016/01	648	864
LG&E	TODS	2016/02	649	864
LG&E	TODS	2016/03	721	864
LG&E	TODS	2016/04	756	864
LG&E	TODS	2016/05	788	864
LG&E	TODS	2016/06	878	878
LG&E	TODS	2016/07	877	878
LG&E	TODS	2016/08	857	878
LG&E	TODP	2015/09	1,131	1,162
LG&E	TODP	2015/10	1,130	1,153
LG&E	TODP	2015/11	1,013	1,153
LG&E	TODP	2015/12	957	1,153
LG&E	TODP	2016/01	934	1,153
LG&E	TODP	2016/02	939	1,153
LG&E	TODP	2016/03	926	1,153
LG&E	TODP	2016/04	929	1,153
LG&E	TODP	2016/05	1,055	1,153
LG&E	TODP	2016/06	1,137	1,137
LG&E	TODP	2016/07	1,237	1,237
LG&E	TODP	2016/08	1,218	1,237
LG&E	TODS	2015/09	595	788
LG&E	TODS	2015/10	682	788
LG&E	TODS	2015/11	642	788
LG&E	TODS	2015/12	704	788
LG&E	TODS	2016/01	737	788
LG&E	TODS	2016/02	710	744
LG&E	TODS	2016/03	700	737
LG&E	TODS	2016/04	659	737
LG&E	TODS	2016/05	553	737
LG&E	TODS	2016/06	553	737

Company	High-Level Rate Category	Billing Period	Base Demand @ 75% Ratchet	Base Demand @ 100% Ratchet
	Description		(kW)	(kW)
LG&E	TODS	2016/07	563	737
LG&E	TODS	2016/08	581	737
LG&E	TODS	2015/09	710	736
LG&E	TODS	2015/10	681	736
LG&E	TODS	2015/11	662	736
LG&E	TODS	2015/12	610	736
LG&E	TODS	2016/01	608	736
LG&E	TODS	2016/02	606	736
LG&E	TODS	2016/03	625	736
LG&E	TODS	2016/04	622	736
LG&E	TODS	2016/05	661	736
LG&E	TODS	2016/06	706	736
LG&E	TODS	2016/07	746	746
LG&E	TODS	2016/08	752	752
LG&E	TODS	2015/09	349	465
LG&E	TODS	2015/10	349	465
LG&E	TODS	2015/11	349	465
LG&E	TODS	2015/12	349	465
LG&E	TODS	2016/01	454	465
LG&E	TODS	2016/02	349	465
LG&E	TODS	2016/03	349	465
LG&E	TODS	2016/04	349	465
LG&E	TODS	2016/05	349	465
LG&E	TODS	2016/06	349	465
LG&E	TODS	2016/07	349	465
LG&E	TODS	2016/08	349	465
LG&E	TODS	2015/09	468	505
LG&E	TODS	2015/10	458	505
LG&E	TODS	2015/11	450	505
LG&E	TODS	2015/12	462	505
LG&E	TODS	2016/01	455	505
LG&E	TODS	2016/02	450	505
LG&E	TODS	2016/03	442	505
LG&E	TODS	2016/04	447	505
LG&E	TODS	2016/05	494	505
LG&E	TODS	2016/06	481	505
LG&E	TODS	2016/07	508	508
LG&E	TODS	2016/08	486	508
LG&E	TODS	2015/09	353	470
LG&E	TODS	2015/10	353	470
LG&E	TODS	2015/09	250	250
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/11	250	250

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODP	2015/09	1,500	1,635
LG&E	TODP	2015/10	1,443	1,635
LG&E	TODP	2015/11	1,340	1,635
LG&E	TODP	2015/12	1,364	1,635
LG&E	TODP	2016/01	1,425	1,635
LG&E	TODP	2016/02	1,525	1,554
LG&E	TODP	2016/03	1,594	1,594
LG&E	TODP	2016/04	1,463	1,594
LG&E	TODP	2016/05	1,480	1,594
LG&E	TODP	2016/06	1,527	1,594
LG&E	TODP	2016/07	1,678	1,678
LG&E	TODP	2016/08	1,652	1,678
LG&E	TODP	2015/09	2,135	2,457
LG&E	TODP	2015/10	2,147	2,457
LG&E	TODP	2015/11	2,025	2,457
LG&E	TODP	2015/12	1,843	2,457
LG&E	TODP	2016/01	1,843	2,457
LG&E	TODP	2016/02	1,843	2,457
LG&E	TODP	2016/03	1,916	2,147
LG&E	TODP	2016/04	1,921	2,147
LG&E	TODP	2016/05	1,730	2,147
LG&E	TODP	2016/06	1,906	2,147
LG&E	TODP	2016/07	2,134	2,147
LG&E	TODP	2016/08	1,873	2,147
LG&E	TODS	2015/09	1,186	1,211
LG&E	TODS	2015/10	1,141	1,211
LG&E	TODS	2015/11	1,136	1,211
LG&E	TODS	2015/12	1,158	1,211
LG&E	TODS	2016/01	1,165	1,211
LG&E	TODS	2016/02	1,205	1,211
LG&E	TODS	2016/03	1,183	1,211
LG&E	TODS	2016/04	1,154	1,211
LG&E	TODS	2016/05	1,200	1,211
LG&E	TODS	2016/06	1,238	1,238

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	1,206	1,238
LG&E	TODS	2016/08	1,204	1,238
LG&E	TODS	2015/09	250	310
LG&E	TODS	2015/10	250	310
LG&E	TODS	2015/11	250	310
LG&E	TODS	2015/12	250	310
LG&E	TODS	2016/01	250	310
LG&E	TODS	2016/02	250	310
LG&E	TODS	2016/03	250	310
LG&E	TODS	2016/04	250	310
LG&E	TODP	2015/09	6,535	6,535
LG&E	TODP	2015/10	6,373	6,535
LG&E	TODP	2015/11	6,227	6,535
LG&E	TODP	2015/12	6,183	6,535
LG&E	TODP	2016/01	6,156	6,535
LG&E	TODP	2016/02	6,214	6,535
LG&E	TODP	2016/03	6,082	6,535
LG&E	TODP	2016/04	6,185	6,535
LG&E	TODP	2016/05	6,214	6,535
LG&E	TODP	2016/06	6,467	6,535
LG&E	TODP	2016/07	7,395	7,395
LG&E	TODP	2016/08	6,430	7,395
LG&E	TODS	2015/09	494	552
LG&E	TODS	2015/10	475	552
LG&E	TODS	2015/11	414	552
LG&E	TODS	2015/12	414	552
LG&E	TODS	2016/01	414	552
LG&E	TODS	2016/02	414	552
LG&E	TODS	2016/03	414	552
LG&E	TODS	2016/04	416	552
LG&E	TODS	2016/05	458	552
LG&E	TODS	2016/06	531	539
LG&E	TODS	2016/07	550	550
LG&E	TODS	2016/08	539	550
LG&E	TODS	2015/09	250	311
LG&E	TODS	2015/10	250	311
LG&E	TODS	2015/11	250	311
LG&E	TODS	2015/12	250	311
LG&E	TODS	2016/01	250	311
LG&E	TODS	2016/02	250	298
LG&E	TODP	2015/09	1,541	2,055
LG&E	TODP	2015/10	1,541	2,055
LG&E	TODP	2015/11	1,541	2,055

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/12	1,551	2,055
LG&E	TODP	2016/01	1,913	2,055
LG&E	TODP	2016/02	1,899	2,055
LG&E	TODP	2016/03	1,932	1,932
LG&E	TODP	2016/04	1,449	1,932
LG&E	TODP	2016/05	1,449	1,932
LG&E	TODP	2016/06	1,449	1,932
LG&E	TODP	2016/07	1,449	1,932
LG&E	TODP	2016/08	1,449	1,932
LG&E	TODS	2015/09	304	304
LG&E	TODS	2015/10	306	306
LG&E	TODS	2015/11	308	308
LG&E	TODS	2015/12	316	316
LG&E	TODS	2016/01	322	322
LG&E	TODS	2016/02	328	328
LG&E	TODS	2016/03	308	328
LG&E	TODS	2016/04	296	328
LG&E	TODS	2016/05	301	328
LG&E	TODS	2016/06	290	328
LG&E	TODS	2016/07	291	328
LG&E	TODS	2016/08	295	328
LG&E	TODS	2015/09	250	275
LG&E	TODS	2015/10	250	275
LG&E	TODS	2015/11	250	275
LG&E	TODS	2015/12	253	275
LG&E	TODS	2016/01	250	259
LG&E	TODS	2016/02	250	256
LG&E	TODS	2016/03	250	253
LG&E	TODS	2016/04	256	256
LG&E	TODS	2016/05	250	256
LG&E	TODS	2016/06	250	256
LG&E	TODS	2016/07	250	256
LG&E	TODS	2016/08	250	256
LG&E	TODS	2015/09	674	695
LG&E	TODS	2015/10	666	695
LG&E	TODS	2015/11	618	695
LG&E	TODS	2015/12	551	695
LG&E	TODS	2016/01	559	695
LG&E	TODS	2016/02	563	695
LG&E	TODS	2016/03	603	695
LG&E	TODS	2016/04	611	695
LG&E	TODS	2016/05	666	695
LG&E	TODS	2016/06	693	695

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	689	695
LG&E	TODS	2016/08	699	699
LG&E	TODS	2015/09	319	425
LG&E	TODS	2015/10	319	425
LG&E	TODS	2015/11	361	425
LG&E	TODS	2015/12	319	425
LG&E	TODS	2016/01	319	425
LG&E	TODS	2016/02	333	425
LG&E	TODS	2016/03	319	425
LG&E	TODS	2016/04	319	425
LG&E	TODS	2016/05	319	425
LG&E	TODS	2016/06	337	361
LG&E	TODS	2016/07	315	361
LG&E	TODS	2016/08	306	361
LG&E	TODS	2015/09	282	294
LG&E	TODS	2015/10	261	294
LG&E	TODS	2015/11	250	294
LG&E	TODS	2015/12	250	294
LG&E	TODS	2016/01	250	294
LG&E	TODS	2016/02	250	294
LG&E	TODS	2016/03	250	294
LG&E	TODS	2016/04	250	294
LG&E	TODS	2016/05	250	294
LG&E	TODS	2016/06	271	294
LG&E	TODS	2016/07	269	294
LG&E	TODS	2016/08	282	282
LG&E	TODS	2015/09	592	757
LG&E	TODS	2015/10	568	757
LG&E	TODS	2015/11	578	757
LG&E	TODS	2015/12	568	757
LG&E	TODS	2016/01	568	757
LG&E	TODS	2016/02	568	757
LG&E	TODS	2016/03	568	757
LG&E	TODS	2016/04	568	757
LG&E	TODS	2016/05	568	757
LG&E	TODS	2016/06	568	757
LG&E	TODS	2016/07	576	757
LG&E	TODS	2016/08	602	602
LG&E	TODS	2015/09	407	407
LG&E	TODS	2015/10	387	407
LG&E	TODS	2015/11	305	407
LG&E	TODS	2015/12	305	407
LG&E	TODS	2016/01	305	407

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	312	407
LG&E	TODS	2016/03	310	407
LG&E	TODS	2016/04	305	407
LG&E	TODS	2016/05	369	407
LG&E	TODS	2016/06	425	425
LG&E	TODS	2016/07	415	425
LG&E	TODS	2016/08	421	425
LG&E	TODS	2015/09	310	329
LG&E	TODS	2015/10	280	329
LG&E	TODS	2015/11	250	329
LG&E	TODS	2015/12	257	329
LG&E	TODS	2016/01	295	329
LG&E	TODS	2016/02	277	329
LG&E	TODS	2016/03	251	329
LG&E	TODS	2016/04	283	329
LG&E	TODS	2016/05	287	329
LG&E	TODS	2016/06	342	342
LG&E	TODS	2016/07	322	342
LG&E	TODS	2016/08	323	342
LG&E	TODP	2015/09	4,566	4,566
LG&E	TODP	2015/10	4,658	4,658
LG&E	TODP	2015/11	4,305	4,658
LG&E	TODP	2015/12	3,884	4,658
LG&E	TODP	2016/01	3,532	4,658
LG&E	TODP	2016/02	4,391	4,658
LG&E	TODP	2016/03	4,612	4,658
LG&E	TODP	2016/04	4,646	4,658
LG&E	TODP	2016/05	4,582	4,658
LG&E	TODP	2016/06	4,800	4,800
LG&E	TODP	2016/07	3,943	4,800
LG&E	TODP	2016/08	3,880	4,800
LG&E	TODP	2015/09	744	769
LG&E	TODP	2015/10	627	769
LG&E	TODP	2015/11	576	769
LG&E	TODP	2015/12	576	769
LG&E	TODP	2016/01	576	769
LG&E	TODP	2016/02	576	769
LG&E	TODP	2016/03	576	769
LG&E	TODP	2016/04	641	769
LG&E	TODP	2016/05	656	769
LG&E	TODP	2016/06	797	797
LG&E	TODP	2016/07	775	797
LG&E	TODP	2016/08	787	797

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/09	1,048	1,067
LG&E	TODS	2015/10	960	1,067
LG&E	TODS	2015/11	814	1,067
LG&E	TODS	2015/12	874	1,067
LG&E	TODS	2016/01	1,082	1,082
LG&E	TODS	2016/02	1,024	1,082
LG&E	TODS	2016/03	909	1,082
LG&E	TODS	2016/04	867	1,082
LG&E	TODS	2016/05	845	1,082
LG&E	TODS	2016/06	971	1,082
LG&E	TODS	2016/07	1,013	1,082
LG&E	TODS	2016/08	1,048	1,082
LG&E	TODS	2015/09	635	635
LG&E	TODS	2015/10	632	635
LG&E	TODS	2015/11	620	635
LG&E	TODS	2015/12	628	635
LG&E	TODS	2016/01	584	635
LG&E	TODS	2016/02	582	635
LG&E	TODS	2016/03	561	635
LG&E	TODS	2016/04	582	635
LG&E	TODS	2016/05	589	635
LG&E	TODS	2016/06	602	635
LG&E	TODS	2016/07	685	685
LG&E	TODS	2016/08	686	686
LG&E	TODS	2015/09	623	830
LG&E	TODS	2015/10	623	830
LG&E	TODS	2015/11	623	830
LG&E	TODS	2015/12	672	830
LG&E	TODS	2016/01	729	830
LG&E	TODS	2016/02	760	830
LG&E	TODS	2016/03	663	830
LG&E	TODS	2016/04	720	830
LG&E	TODS	2016/05	627	830
LG&E	TODS	2016/06	634	830
LG&E	TODS	2016/07	651	760
LG&E	TODS	2016/08	732	760
LG&E	TODP	2015/09	6,224	7,816
LG&E	TODP	2015/10	6,045	7,816
LG&E	TODP	2015/11	6,025	7,430
LG&E	TODP	2015/12	6,293	7,430
LG&E	TODP	2016/01	6,256	7,430
LG&E	TODP	2016/02	5,951	7,430
LG&E	TODP	2016/03	6,096	7,430

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/04	5,758	7,430
LG&E	TODP	2016/05	6,251	7,067
LG&E	TODP	2016/06	6,098	7,067
LG&E	TODP	2016/07	6,243	6,327
LG&E	TODP	2016/08	5,647	6,293
LG&E	TODS	2015/09	373	497
LG&E	TODS	2015/10	373	497
LG&E	TODS	2015/11	373	497
LG&E	TODS	2015/12	373	497
LG&E	TODS	2016/01	376	497
LG&E	TODS	2016/02	373	497
LG&E	TODS	2016/03	461	497
LG&E	TODS	2016/04	456	461
LG&E	TODS	2016/05	439	461
LG&E	TODS	2016/06	390	461
LG&E	TODS	2016/07	346	461
LG&E	TODS	2016/08	346	461
LG&E	TODP	2015/09	832	1,109
LG&E	TODP	2015/10	832	1,109
LG&E	TODP	2015/11	832	1,109
LG&E	TODP	2015/12	832	1,109
LG&E	TODP	2016/01	832	1,109
LG&E	TODP	2016/02	832	1,109
LG&E	TODP	2016/03	659	878
LG&E	TODP	2016/04	659	878
LG&E	TODP	2016/05	659	878
LG&E	TODP	2016/06	659	878
LG&E	TODP	2016/07	659	878
LG&E	TODP	2016/08	624	832
LG&E	TODP	2015/09	1,610	1,785
LG&E	TODP	2015/10	1,438	1,610
LG&E	TODP	2015/11	1,270	1,610
LG&E	TODP	2015/12	1,208	1,610
LG&E	TODP	2016/01	1,208	1,610
LG&E	TODP	2016/02	1,208	1,610
LG&E	TODP	2016/03	1,208	1,610
LG&E	TODP	2016/04	1,208	1,610
LG&E	TODP	2016/05	1,208	1,610
LG&E	TODP	2016/06	1,208	1,610
LG&E	TODP	2016/07	1,208	1,610
LG&E	TODP	2016/08	1,208	1,610
LG&E	TODS	2016/02	250	300
LG&E	TODS	2016/03	258	300

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/04	264	300
LG&E	TODS	2016/05	284	300
LG&E	TODS	2016/06	286	300
LG&E	TODS	2016/07	304	304
LG&E	TODS	2016/08	346	346
LG&E	TODS	2015/09	552	552
LG&E	TODS	2015/10	485	552
LG&E	TODS	2015/11	421	552
LG&E	TODS	2015/12	414	552
LG&E	TODS	2016/01	419	552
LG&E	TODS	2016/02	414	552
LG&E	TODS	2016/03	414	552
LG&E	TODS	2016/04	414	552
LG&E	TODS	2016/05	430	552
LG&E	TODS	2016/06	518	552
LG&E	TODS	2016/07	563	563
LG&E	TODS	2016/08	533	563
LG&E	TODS	2015/09	270	290
LG&E	TODS	2015/10	250	290
LG&E	TODS	2015/11	250	290
LG&E	TODS	2015/12	250	290
LG&E	TODS	2016/01	250	290
LG&E	TODS	2016/02	250	290
LG&E	TODS	2016/03	250	290
LG&E	TODS	2016/04	250	290
LG&E	TODS	2016/05	250	290
LG&E	TODS	2016/06	276	278
LG&E	TODS	2016/07	306	306
LG&E	TODS	2016/08	290	306
LG&E	TODS	2015/09	621	639
LG&E	TODS	2015/10	554	639
LG&E	TODS	2015/11	504	639
LG&E	TODS	2015/12	479	639
LG&E	TODS	2016/01	498	639
LG&E	TODS	2016/02	479	639
LG&E	TODS	2016/03	479	639
LG&E	TODS	2016/04	479	639
LG&E	TODS	2016/05	537	639
LG&E	TODS	2016/06	571	639
LG&E	TODS	2016/07	572	639
LG&E	TODS	2016/08	602	621
LG&E	TODS	2015/09	653	694
LG&E	TODS	2015/10	594	694

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/11	548	694
LG&E	TODS	2015/12	522	694
LG&E	TODS	2016/01	520	694
LG&E	TODS	2016/02	520	694
LG&E	TODS	2016/03	522	694
LG&E	TODS	2016/04	528	694
LG&E	TODS	2016/05	580	694
LG&E	TODS	2016/06	665	694
LG&E	TODS	2016/07	688	694
LG&E	TODS	2016/08	695	695
LG&E	TODS	2015/09	929	929
LG&E	TODS	2015/10	746	929
LG&E	TODS	2015/11	785	929
LG&E	TODS	2015/12	697	929
LG&E	TODS	2016/01	697	929
LG&E	TODS	2016/02	697	929
LG&E	TODS	2016/03	768	929
LG&E	TODS	2016/04	840	929
LG&E	TODS	2016/05	806	929
LG&E	TODS	2016/06	697	929
LG&E	TODS	2016/07	697	929
LG&E	TODS	2016/08	914	929
LG&E	TODS	2015/09	437	484
LG&E	TODS	2015/10	374	484
LG&E	TODS	2015/11	363	484
LG&E	TODS	2015/12	363	484
LG&E	TODS	2016/01	363	484
LG&E	TODS	2016/02	363	484
LG&E	TODS	2016/03	363	484
LG&E	TODS	2016/04	363	484
LG&E	TODS	2016/05	363	484
LG&E	TODS	2016/06	442	447
LG&E	TODS	2016/07	442	447
LG&E	TODS	2016/08	466	466
LG&E	TODS	2015/09	405	425
LG&E	TODS	2015/10	350	425
LG&E	TODS	2015/11	322	425
LG&E	TODS	2015/12	319	425
LG&E	TODS	2016/01	319	425
LG&E	TODS	2016/02	319	425
LG&E	TODS	2016/03	319	425
LG&E	TODS	2016/04	319	425
LG&E	TODS	2016/05	319	425

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/06	330	425
LG&E	TODS	2016/07	358	425
LG&E	TODS	2016/08	395	425
LG&E	TODS	2015/09	538	552
LG&E	TODS	2015/10	501	552
LG&E	TODS	2015/11	472	552
LG&E	TODS	2015/12	414	552
LG&E	TODS	2016/01	414	552
LG&E	TODS	2016/02	414	552
LG&E	TODS	2016/03	414	552
LG&E	TODS	2016/04	414	552
LG&E	TODS	2016/05	450	552
LG&E	TODS	2016/06	474	552
LG&E	TODS	2016/07	555	555
LG&E	TODS	2016/08	547	555
LG&E	TODS	2015/09	515	534
LG&E	TODS	2015/10	461	534
LG&E	TODS	2015/11	407	534
LG&E	TODS	2015/12	400	534
LG&E	TODS	2016/01	400	534
LG&E	TODS	2016/02	400	534
LG&E	TODS	2016/03	400	534
LG&E	TODS	2016/04	400	534
LG&E	TODS	2016/05	447	534
LG&E	TODS	2016/06	515	534
LG&E	TODS	2016/07	543	543
LG&E	TODS	2016/08	543	543
LG&E	TODS	2015/09	320	375
LG&E	TODS	2015/10	281	375
LG&E	TODS	2015/11	323	375
LG&E	TODS	2015/12	281	375
LG&E	TODS	2016/01	281	375
LG&E	TODS	2016/02	281	375
LG&E	TODS	2016/03	281	375
LG&E	TODS	2016/04	281	375
LG&E	TODS	2016/05	281	375
LG&E	TODS	2016/06	317	375
LG&E	TODS	2016/07	339	375
LG&E	TODS	2016/08	346	375
LG&E	TODS	2015/09	349	466
LG&E	TODS	2015/10	363	466
LG&E	TODS	2015/11	402	466
LG&E	TODS	2015/12	384	466

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/01	458	466
LG&E	TODS	2016/02	406	458
LG&E	TODS	2016/03	368	458
LG&E	TODS	2016/04	343	458
LG&E	TODS	2016/05	343	458
LG&E	TODS	2016/06	343	458
LG&E	TODS	2016/07	343	458
LG&E	TODS	2016/08	343	458
LG&E	TODS	2015/09	521	586
LG&E	TODS	2015/10	483	586
LG&E	TODS	2015/11	441	586
LG&E	TODS	2015/12	440	586
LG&E	TODS	2016/01	440	586
LG&E	TODS	2016/02	440	586
LG&E	TODS	2016/03	440	586
LG&E	TODS	2016/04	451	586
LG&E	TODS	2016/05	508	586
LG&E	TODS	2016/06	497	586
LG&E	TODS	2016/07	633	633
LG&E	TODS	2016/08	622	633
LG&E	TODS	2015/09	454	550
LG&E	TODS	2015/10	414	550
LG&E	TODS	2015/11	413	550
LG&E	TODS	2015/12	413	550
LG&E	TODS	2016/01	413	550
LG&E	TODS	2016/02	413	550
LG&E	TODS	2016/03	413	550
LG&E	TODS	2016/04	413	550
LG&E	TODS	2016/05	430	550
LG&E	TODS	2016/06	469	550
LG&E	TODS	2016/07	494	550
LG&E	TODS	2016/08	497	550
LG&E	TODS	2015/09	486	522
LG&E	TODS	2015/10	447	522
LG&E	TODS	2015/11	426	522
LG&E	TODS	2015/12	392	522
LG&E	TODS	2016/01	392	522
LG&E	TODS	2016/02	392	522
LG&E	TODS	2016/03	393	522
LG&E	TODS	2016/04	438	522
LG&E	TODS	2016/05	457	522
LG&E	TODS	2016/06	478	522
LG&E	TODS	2016/07	558	558

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/08	543	558
LG&E	TODS	2015/09	513	565
LG&E	TODS	2015/10	570	570
LG&E	TODS	2015/11	472	570
LG&E	TODS	2015/12	462	570
LG&E	TODS	2016/01	427	570
LG&E	TODS	2016/02	427	570
LG&E	TODS	2016/03	427	570
LG&E	TODS	2016/04	439	570
LG&E	TODS	2016/05	467	570
LG&E	TODS	2016/06	472	570
LG&E	TODS	2016/07	590	590
LG&E	TODS	2016/08	598	598
LG&E	TODS	2015/09	785	840
LG&E	TODS	2015/10	866	866
LG&E	TODS	2015/11	782	866
LG&E	TODS	2015/12	770	866
LG&E	TODS	2016/01	744	866
LG&E	TODS	2016/02	737	866
LG&E	TODS	2016/03	749	866
LG&E	TODS	2016/04	766	866
LG&E	TODS	2016/05	770	866
LG&E	TODS	2016/06	768	866
LG&E	TODS	2016/07	761	866
LG&E	TODS	2016/08	650	866
LG&E	RTS	2015/09	383	510
LG&E	RTS	2015/10	383	510
LG&E	RTS	2015/11	383	510
LG&E	RTS	2015/12	383	510
LG&E	RTS	2016/01	383	510
LG&E	RTS	2016/02	383	510
LG&E	RTS	2016/03	383	510
LG&E	RTS	2016/04	250	250
LG&E	RTS	2016/05	250	250
LG&E	RTS	2016/06	250	250
LG&E	RTS	2016/07	250	250
LG&E	RTS	2016/08	250	250
LG&E	TODS	2015/09	1,554	1,666
LG&E	TODS	2015/10	1,552	1,666
LG&E	TODS	2015/11	1,557	1,666
LG&E	TODS	2015/12	1,462	1,666
LG&E	TODS	2016/01	1,442	1,666
LG&E	TODS	2016/02	1,518	1,666

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/03	1,405	1,666
LG&E	TODS	2016/04	1,395	1,666
LG&E	TODS	2016/05	1,486	1,666
LG&E	TODS	2016/06	1,576	1,666
LG&E	TODS	2016/07	1,570	1,666
LG&E	TODS	2016/08	1,611	1,611
LG&E	TODS	2015/09	1,085	1,147
LG&E	TODS	2015/10	1,040	1,147
LG&E	TODS	2015/11	1,013	1,147
LG&E	TODS	2015/12	962	1,147
LG&E	TODS	2016/01	971	1,147
LG&E	TODS	2016/02	1,008	1,147
LG&E	TODS	2016/03	1,045	1,147
LG&E	TODS	2016/04	1,072	1,147
LG&E	TODS	2016/05	1,139	1,142
LG&E	TODS	2016/06	1,176	1,176
LG&E	TODS	2016/07	1,171	1,176
LG&E	TODS	2016/08	1,174	1,176
LG&E	TODS	2015/09	744	787
LG&E	TODS	2015/10	721	787
LG&E	TODS	2015/11	623	787
LG&E	TODS	2015/12	592	787
LG&E	TODS	2016/01	590	787
LG&E	TODS	2016/02	590	787
LG&E	TODS	2016/03	590	787
LG&E	TODS	2016/04	604	787
LG&E	TODS	2016/05	605	787
LG&E	TODS	2016/06	662	787
LG&E	TODS	2016/07	741	786
LG&E	TODS	2016/08	754	754
LG&E	TODS	2015/09	2,246	2,303
LG&E	TODS	2015/10	2,212	2,303
LG&E	TODS	2015/11	1,731	2,303
LG&E	TODS	2015/12	1,727	2,303
LG&E	TODS	2016/01	1,727	2,303
LG&E	TODS	2016/02	1,727	2,303
LG&E	TODS	2016/03	1,727	2,303
LG&E	TODS	2016/04	1,727	2,303
LG&E	TODS	2016/05	1,965	2,303
LG&E	TODS	2016/06	1,808	2,303
LG&E	TODS	2016/07	2,119	2,303
LG&E	TODS	2016/08	2,148	2,246
LG&E	TODP	2015/09	5,632	5,703

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/10	5,611	5,703
LG&E	TODP	2015/11	5,142	5,703
LG&E	TODP	2015/12	4,277	5,703
LG&E	TODP	2016/01	5,351	5,703
LG&E	TODP	2016/02	4,277	5,703
LG&E	TODP	2016/03	4,277	5,703
LG&E	TODP	2016/04	5,281	5,703
LG&E	TODP	2016/05	4,674	5,703
LG&E	TODP	2016/06	5,471	5,703
LG&E	TODP	2016/07	5,461	5,703
LG&E	TODP	2016/08	5,564	5,632
LG&E	TODS	2015/09	1,541	1,541
LG&E	TODS	2015/10	1,459	1,541
LG&E	TODS	2015/11	1,438	1,541
LG&E	TODS	2015/12	1,438	1,541
LG&E	TODS	2016/01	1,589	1,589
LG&E	TODS	2016/02	1,478	1,589
LG&E	TODS	2016/03	1,296	1,589
LG&E	TODS	2016/04	1,299	1,589
LG&E	TODS	2016/05	1,426	1,589
LG&E	TODS	2016/06	1,490	1,589
LG&E	TODS	2016/07	1,574	1,589
LG&E	TODS	2016/08	1,509	1,589
LG&E	TODS	2015/09	268	350
LG&E	TODS	2015/10	263	350
LG&E	TODS	2015/11	263	350
LG&E	TODS	2015/12	278	350
LG&E	TODS	2016/01	263	350
LG&E	TODS	2016/02	263	350
LG&E	TODS	2016/03	263	350
LG&E	TODS	2016/04	263	350
LG&E	TODS	2016/05	263	350
LG&E	TODS	2016/06	293	350
LG&E	TODS	2016/07	301	350
LG&E	TODS	2016/08	289	350
LG&E	TODP	2015/09	1,285	1,362
LG&E	TODP	2015/10	1,148	1,362
LG&E	TODP	2015/11	1,139	1,362
LG&E	TODP	2015/12	1,188	1,362
LG&E	TODP	2016/01	1,153	1,362
LG&E	TODP	2016/02	1,022	1,362
LG&E	TODP	2016/03	1,149	1,362
LG&E	TODP	2016/04	1,211	1,362

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/05	1,183	1,362
LG&E	TODP	2016/06	1,220	1,362
LG&E	TODP	2016/07	1,274	1,362
LG&E	TODP	2016/08	1,279	1,285
LG&E	TODS	2015/09	530	535
LG&E	TODS	2015/10	430	535
LG&E	TODS	2015/11	430	535
LG&E	TODS	2015/12	425	535
LG&E	TODS	2016/01	406	535
LG&E	TODS	2016/02	446	535
LG&E	TODS	2016/03	456	535
LG&E	TODS	2016/04	451	535
LG&E	TODS	2016/05	401	535
LG&E	TODS	2016/06	506	535
LG&E	TODS	2016/07	492	535
LG&E	TODS	2016/08	475	530
LG&E	TODS	2015/09	530	578
LG&E	TODS	2015/10	469	578
LG&E	TODS	2015/11	434	578
LG&E	TODS	2015/12	434	578
LG&E	TODS	2016/01	434	578
LG&E	TODS	2016/02	434	578
LG&E	TODS	2016/03	434	578
LG&E	TODS	2016/04	434	578
LG&E	TODS	2016/05	453	578
LG&E	TODS	2016/06	577	578
LG&E	TODS	2016/07	559	578
LG&E	TODS	2016/08	573	577
LG&E	TODS	2015/09	578	590
LG&E	TODS	2015/10	568	590
LG&E	TODS	2015/11	534	590
LG&E	TODS	2015/12	507	590
LG&E	TODS	2016/01	485	590
LG&E	TODS	2016/02	486	590
LG&E	TODS	2016/03	509	590
LG&E	TODS	2016/04	520	590
LG&E	TODS	2016/05	515	590
LG&E	TODS	2016/06	571	578
LG&E	TODS	2016/07	582	582
LG&E	TODS	2016/08	566	582
LG&E	TODS	2015/09	1,414	1,459
LG&E	TODS	2015/10	1,254	1,459
LG&E	TODS	2015/11	1,094	1,459

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	1,094	1,459
LG&E	TODS	2016/01	1,094	1,459
LG&E	TODS	2016/02	1,094	1,459
LG&E	TODS	2016/03	1,094	1,459
LG&E	TODS	2016/04	1,094	1,459
LG&E	TODS	2016/05	1,150	1,459
LG&E	TODS	2016/06	1,326	1,459
LG&E	TODS	2016/07	1,442	1,459
LG&E	TODS	2016/08	1,413	1,442
LG&E	TODS	2015/09	703	761
LG&E	TODS	2015/10	588	761
LG&E	TODS	2015/11	571	761
LG&E	TODS	2015/12	571	761
LG&E	TODS	2016/01	571	761
LG&E	TODS	2016/02	571	761
LG&E	TODS	2016/03	571	761
LG&E	TODS	2016/04	571	761
LG&E	TODS	2016/05	571	761
LG&E	TODS	2016/06	648	761
LG&E	TODS	2016/07	691	761
LG&E	TODS	2016/08	679	703
LG&E	TODS	2015/09	362	364
LG&E	TODS	2015/10	291	364
LG&E	TODS	2015/11	301	364
LG&E	TODS	2015/12	291	364
LG&E	TODS	2016/01	273	364
LG&E	TODS	2016/02	273	364
LG&E	TODS	2016/03	273	364
LG&E	TODS	2016/04	273	364
LG&E	TODS	2016/05	278	364
LG&E	TODS	2016/06	332	364
LG&E	TODS	2016/07	360	364
LG&E	TODS	2016/08	356	362
LG&E	TODS	2015/09	254	256
LG&E	TODS	2015/10	250	256
LG&E	TODS	2015/11	250	256
LG&E	TODS	2015/12	250	256
LG&E	TODS	2016/01	250	256
LG&E	TODS	2016/02	250	256
LG&E	TODS	2016/03	250	256
LG&E	TODS	2016/04	250	256
LG&E	TODS	2016/05	250	256
LG&E	TODS	2016/06	256	256

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	250	256
LG&E	TODS	2016/08	252	256
LG&E	TODS	2015/09	372	394
LG&E	TODS	2015/10	360	394
LG&E	TODS	2015/11	361	380
LG&E	TODS	2015/12	391	391
LG&E	TODS	2016/01	375	391
LG&E	TODS	2016/02	376	391
LG&E	TODS	2016/03	374	391
LG&E	TODS	2016/04	385	391
LG&E	TODS	2016/05	384	391
LG&E	TODS	2016/06	386	391
LG&E	TODS	2016/07	390	391
LG&E	TODS	2016/08	386	391
LG&E	TODP	2015/09	1,829	1,850
LG&E	TODP	2015/10	1,816	1,850
LG&E	TODP	2015/11	1,829	1,850
LG&E	TODP	2015/12	1,785	1,850
LG&E	TODP	2016/01	1,780	1,850
LG&E	TODP	2016/02	1,737	1,850
LG&E	TODP	2016/03	1,740	1,850
LG&E	TODP	2016/04	1,596	1,850
LG&E	TODP	2016/05	1,602	1,850
LG&E	TODP	2016/06	1,604	1,850
LG&E	TODP	2016/07	1,663	1,839
LG&E	TODP	2016/08	1,780	1,829
LG&E	TODS	2015/09	701	832
LG&E	TODS	2015/10	747	832
LG&E	TODS	2015/11	808	832
LG&E	TODS	2015/12	717	832
LG&E	TODS	2016/01	664	832
LG&E	TODS	2016/02	818	832
LG&E	TODS	2016/03	795	832
LG&E	TODS	2016/04	726	832
LG&E	TODS	2016/05	805	832
LG&E	TODS	2016/06	856	856
LG&E	TODS	2016/07	662	856
LG&E	TODS	2016/08	856	856
LG&E	TODS	2015/09	858	1,022
LG&E	TODS	2015/10	830	1,022
LG&E	TODS	2015/11	779	994
LG&E	TODS	2015/12	878	994
LG&E	TODS	2016/01	877	994

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	898	953
LG&E	TODS	2016/03	897	953
LG&E	TODS	2016/04	790	953
LG&E	TODS	2016/05	830	953
LG&E	TODS	2016/06	834	944
LG&E	TODS	2016/07	894	910
LG&E	TODS	2016/08	914	914
LG&E	TODS	2015/09	336	336
LG&E	TODS	2015/10	305	336
LG&E	TODS	2015/11	270	336
LG&E	TODS	2015/12	284	336
LG&E	TODS	2016/01	277	336
LG&E	TODS	2016/02	252	336
LG&E	TODS	2016/03	252	336
LG&E	TODS	2016/04	265	336
LG&E	TODS	2016/05	326	336
LG&E	TODS	2016/06	275	336
LG&E	TODS	2016/07	252	336
LG&E	TODS	2016/08	376	376
LG&E	TODS	2015/09	677	709
LG&E	TODS	2015/10	651	709
LG&E	TODS	2015/11	601	709
LG&E	TODS	2015/12	618	709
LG&E	TODS	2016/01	541	709
LG&E	TODS	2016/02	532	709
LG&E	TODS	2016/03	532	709
LG&E	TODS	2016/04	582	709
LG&E	TODS	2016/05	620	709
LG&E	TODS	2016/06	615	709
LG&E	TODS	2016/07	735	735
LG&E	TODS	2016/08	727	735
LG&E	TODP	2015/09	12,399	12,399
LG&E	TODP	2015/10	11,103	12,399
LG&E	TODP	2015/11	10,706	12,399
LG&E	TODP	2015/12	9,299	12,399
LG&E	TODP	2016/01	9,299	12,399
LG&E	TODP	2016/02	9,299	12,399
LG&E	TODP	2016/03	9,299	12,399
LG&E	TODP	2016/04	9,728	12,399
LG&E	TODP	2016/05	9,837	12,399
LG&E	TODP	2016/06	11,566	12,399
LG&E	TODP	2016/07	12,320	12,399
LG&E	TODP	2016/08	12,881	12,881

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/09	395	425
LG&E	TODS	2015/10	398	425
LG&E	TODS	2015/11	346	425
LG&E	TODS	2015/12	339	425
LG&E	TODS	2016/01	322	425
LG&E	TODS	2016/02	319	425
LG&E	TODS	2016/03	319	425
LG&E	TODS	2016/04	326	425
LG&E	TODS	2016/05	336	425
LG&E	TODS	2016/06	393	425
LG&E	TODS	2016/07	428	428
LG&E	TODS	2016/08	445	445
LG&E	TODS	2015/09	250	250
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/11	250	250
LG&E	TODS	2015/12	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2015/09	263	287
LG&E	TODS	2015/10	251	287
LG&E	TODS	2015/11	250	287
LG&E	TODS	2015/12	250	287
LG&E	TODS	2016/01	250	287
LG&E	TODS	2016/02	250	287
LG&E	TODS	2016/03	250	287
LG&E	TODS	2016/04	250	287
LG&E	TODS	2016/05	250	287
LG&E	TODS	2016/06	253	287
LG&E	TODS	2016/07	278	287
LG&E	TODS	2016/08	280	280
LG&E	TODS	2015/09	279	280
LG&E	TODS	2015/10	268	280
LG&E	TODS	2015/11	271	280
LG&E	TODS	2015/12	250	280
LG&E	TODS	2016/01	250	280
LG&E	TODS	2016/02	250	280
LG&E	TODS	2016/03	255	280
LG&E	TODS	2016/04	285	285
LG&E	TODS	2016/05	275	285
LG&E	TODS	2016/06	267	285
LG&E	TODS	2016/07	275	285
LG&E	TODS	2016/08	278	285
LG&E	TODS	2015/09	317	338
LG&E	TODS	2015/10	268	338

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/11	253	338
LG&E	TODS	2015/12	253	338
LG&E	TODS	2016/01	253	338
LG&E	TODS	2016/02	253	338
LG&E	TODS	2016/03	253	338
LG&E	TODS	2016/04	253	338
LG&E	TODS	2016/05	259	338
LG&E	TODS	2016/06	269	338
LG&E	TODS	2016/07	288	338
LG&E	TODS	2016/08	303	317
LG&E	TODS	2015/09	250	319
LG&E	TODS	2015/10	250	319
LG&E	TODS	2015/11	250	319
LG&E	TODS	2015/12	250	319
LG&E	TODS	2016/01	250	319
LG&E	TODS	2016/02	250	319
LG&E	TODS	2016/03	250	319
LG&E	TODS	2016/04	250	319
LG&E	TODS	2016/05	250	319
LG&E	TODS	2016/06	293	319
LG&E	TODS	2016/07	250	319
LG&E	TODS	2016/08	260	293
LG&E	TODS	2015/09	461	461
LG&E	TODS	2015/10	410	461
LG&E	TODS	2015/11	376	461
LG&E	TODS	2015/12	346	461
LG&E	TODS	2016/01	384	461
LG&E	TODS	2016/02	346	461
LG&E	TODS	2016/03	346	461
LG&E	TODS	2016/04	347	461
LG&E	TODS	2016/05	346	461
LG&E	TODS	2016/06	346	461
LG&E	TODP	2015/09	747	859
LG&E	TODP	2015/10	763	859
LG&E	TODP	2015/11	778	859
LG&E	TODP	2015/12	799	859
LG&E	TODP	2016/01	772	859
LG&E	TODP	2016/02	772	859
LG&E	TODP	2016/03	769	859
LG&E	TODP	2016/04	683	857
LG&E	TODP	2016/05	780	857
LG&E	TODP	2016/06	670	857
LG&E	TODP	2016/07	698	799

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/08	773	799
LG&E	TODP	2015/09	378	417
LG&E	TODP	2015/10	380	417
LG&E	TODP	2015/11	389	417
LG&E	TODP	2015/12	371	417
LG&E	TODP	2016/01	313	417
LG&E	TODP	2016/02	355	417
LG&E	TODP	2016/03	369	417
LG&E	TODP	2016/04	364	417
LG&E	TODP	2016/05	380	417
LG&E	TODP	2016/06	469	469
LG&E	TODP	2016/07	460	469
LG&E	TODP	2016/08	437	469
LG&E	TODS	2015/09	1,429	1,897
LG&E	TODS	2015/10	1,423	1,897
LG&E	TODS	2015/11	1,423	1,897
LG&E	TODS	2015/12	1,423	1,897
LG&E	TODS	2016/01	1,496	1,897
LG&E	TODS	2016/02	1,657	1,897
LG&E	TODS	2016/03	1,592	1,657
LG&E	TODS	2016/04	1,243	1,657
LG&E	TODS	2016/05	1,243	1,657
LG&E	TODS	2016/06	1,243	1,657
LG&E	TODS	2016/07	1,455	1,657
LG&E	TODS	2016/08	1,427	1,657
LG&E	TODP	2015/09	6,412	6,412
LG&E	TODP	2015/10	4,809	6,412
LG&E	TODP	2015/11	4,809	6,412
LG&E	TODP	2015/12	4,809	6,412
LG&E	TODP	2016/01	4,809	6,412
LG&E	TODP	2016/02	4,809	6,412
LG&E	TODP	2016/03	4,809	6,412
LG&E	TODP	2016/04	4,809	6,412
LG&E	TODP	2016/05	4,809	6,412
LG&E	TODP	2016/06	4,809	6,412
LG&E	TODP	2016/07	4,809	6,412
LG&E	TODP	2016/08	4,809	6,412
LG&E	TODP	2015/09	6,115	6,400
LG&E	TODP	2015/10	5,180	6,400
LG&E	TODP	2015/11	5,259	6,400
LG&E	TODP	2015/12	4,800	6,400
LG&E	TODP	2016/01	4,800	6,400
LG&E	TODP	2016/02	4,800	6,400

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/03	4,800	6,400
LG&E	TODP	2016/04	4,800	6,400
LG&E	TODP	2016/05	4,800	6,400
LG&E	TODP	2016/06	4,800	6,400
LG&E	TODP	2016/07	4,983	6,115
LG&E	TODP	2016/08	4,992	6,115
LG&E	TODP	2015/09	3,515	3,817
LG&E	TODP	2015/10	3,223	3,817
LG&E	TODP	2015/11	3,119	3,817
LG&E	TODP	2015/12	3,041	3,817
LG&E	TODP	2016/01	3,315	3,817
LG&E	TODP	2016/02	3,389	3,817
LG&E	TODP	2016/03	3,273	3,817
LG&E	TODP	2016/04	2,985	3,817
LG&E	TODP	2016/05	3,315	3,817
LG&E	TODP	2016/06	3,371	3,817
LG&E	TODP	2016/07	3,605	3,817
LG&E	TODP	2016/08	3,712	3,712
LG&E	TODP	2015/09	42,108	44,376
LG&E	TODP	2015/10	39,386	44,376
LG&E	TODP	2015/11	39,424	44,376
LG&E	TODP	2015/12	37,608	44,376
LG&E	TODP	2016/01	37,497	44,376
LG&E	TODP	2016/02	35,656	44,376
LG&E	TODP	2016/03	38,800	44,376
LG&E	TODP	2016/04	37,511	44,376
LG&E	TODP	2016/05	38,306	44,376
LG&E	TODP	2016/06	43,345	44,376
LG&E	TODP	2016/07	43,326	43,375
LG&E	TODP	2016/08	43,326	43,345
LG&E	TODP	2015/09	2,247	2,337
LG&E	TODP	2015/10	2,142	2,337
LG&E	TODP	2015/11	1,879	2,337
LG&E	TODP	2015/12	1,821	2,337
LG&E	TODP	2016/01	1,974	2,337
LG&E	TODP	2016/02	1,910	2,337
LG&E	TODP	2016/03	1,924	2,337
LG&E	TODP	2016/04	1,837	2,337
LG&E	TODP	2016/05	1,762	2,337
LG&E	TODP	2016/06	2,191	2,337
LG&E	TODP	2016/07	2,307	2,337
LG&E	TODP	2016/08	2,312	2,312
LG&E	TODP	2015/09	11,676	12,174

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/10	11,775	12,174
LG&E	TODP	2015/11	11,775	12,174
LG&E	TODP	2015/12	12,231	12,231
LG&E	TODP	2016/01	12,331	12,331
LG&E	TODP	2016/02	12,132	12,331
LG&E	TODP	2016/03	11,817	12,331
LG&E	TODP	2016/04	11,817	12,331
LG&E	TODP	2016/05	11,817	12,331
LG&E	TODP	2016/06	11,578	12,331
LG&E	TODP	2016/07	11,676	12,331
LG&E	TODP	2016/08	11,618	12,331
LG&E	TODS	2015/09	768	900
LG&E	TODS	2015/10	781	900
LG&E	TODS	2015/11	762	900
LG&E	TODS	2015/12	691	900
LG&E	TODS	2016/01	762	900
LG&E	TODS	2016/02	742	900
LG&E	TODS	2016/03	678	900
LG&E	TODS	2016/04	685	900
LG&E	TODS	2016/05	678	900
LG&E	TODS	2016/06	685	900
LG&E	TODS	2016/07	678	900
LG&E	TODS	2016/08	710	900
LG&E	TODS	2015/09	467	483
LG&E	TODS	2015/10	394	483
LG&E	TODS	2015/11	378	483
LG&E	TODS	2015/12	374	483
LG&E	TODS	2016/01	362	483
LG&E	TODS	2016/02	362	483
LG&E	TODS	2016/03	362	483
LG&E	TODS	2016/04	365	483
LG&E	TODS	2016/05	368	483
LG&E	TODS	2016/06	397	483
LG&E	TODS	2016/07	406	477
LG&E	TODS	2016/08	406	467
LG&E	TODS	2015/09	338	352
LG&E	TODS	2015/10	362	362
LG&E	TODS	2015/11	326	362
LG&E	TODS	2015/12	286	362
LG&E	TODS	2016/01	271	362
LG&E	TODS	2016/02	272	362
LG&E	TODS	2016/03	280	362
LG&E	TODS	2016/04	271	362

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	294	362
LG&E	TODS	2016/06	280	362
LG&E	TODS	2016/07	322	362
LG&E	TODS	2016/08	333	362
LG&E	TODS	2015/09	288	325
LG&E	TODS	2015/10	259	325
LG&E	TODS	2015/11	261	325
LG&E	TODS	2015/12	273	325
LG&E	TODS	2016/01	280	325
LG&E	TODS	2016/02	260	325
LG&E	TODS	2016/03	271	325
LG&E	TODS	2016/04	287	325
LG&E	TODS	2016/05	257	325
LG&E	TODS	2016/06	274	325
LG&E	TODS	2016/07	287	325
LG&E	TODS	2016/08	289	325
LG&E	TODS	2015/09	362	420
LG&E	TODS	2015/10	333	420
LG&E	TODS	2015/11	320	420
LG&E	TODS	2015/12	318	420
LG&E	TODS	2016/01	315	420
LG&E	TODS	2016/02	315	420
LG&E	TODS	2016/03	317	420
LG&E	TODS	2016/04	323	420
LG&E	TODS	2016/05	357	420
LG&E	TODS	2016/06	358	420
LG&E	TODS	2016/07	390	420
LG&E	TODS	2016/08	374	420
LG&E	TODS	2015/09	646	667
LG&E	TODS	2015/10	544	667
LG&E	TODS	2015/11	534	667
LG&E	TODS	2015/12	500	667
LG&E	TODS	2016/01	500	667
LG&E	TODS	2016/02	500	667
LG&E	TODS	2016/03	500	667
LG&E	TODS	2016/04	515	667
LG&E	TODS	2016/05	500	667
LG&E	TODS	2016/06	653	653
LG&E	TODS	2016/07	674	674
LG&E	TODS	2016/08	707	707
LG&E	TODS	2015/09	373	379
LG&E	TODS	2015/10	330	379
LG&E	TODS	2015/11	304	379

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	284	379
LG&E	TODS	2016/01	291	379
LG&E	TODS	2016/02	284	379
LG&E	TODS	2016/03	284	379
LG&E	TODS	2016/04	285	379
LG&E	TODS	2016/05	322	379
LG&E	TODS	2016/06	352	379
LG&E	TODS	2016/07	371	379
LG&E	TODS	2016/08	354	373
LG&E	TODS	2015/09	368	491
LG&E	TODS	2015/10	368	491
LG&E	TODS	2015/11	368	491
LG&E	TODS	2015/12	395	491
LG&E	TODS	2016/01	470	491
LG&E	TODS	2016/02	446	470
LG&E	TODS	2016/03	394	470
LG&E	TODS	2016/04	373	470
LG&E	TODS	2016/05	353	470
LG&E	TODS	2016/06	357	470
LG&E	TODS	2016/07	357	470
LG&E	TODS	2016/08	358	470
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODP	2015/09	5,209	6,366
LG&E	TODP	2015/10	4,801	6,366
LG&E	TODP	2015/11	5,311	6,366
LG&E	TODP	2015/12	5,098	6,366
LG&E	TODP	2016/01	5,002	6,366
LG&E	TODP	2016/02	5,055	6,366
LG&E	TODP	2016/03	5,098	6,366
LG&E	TODP	2016/04	5,360	6,366
LG&E	TODP	2016/05	5,120	6,366
LG&E	TODP	2016/06	5,166	5,698
LG&E	TODP	2016/07	5,325	5,698
LG&E	TODP	2016/08	5,249	5,360
LG&E	TODS	2015/09	893	906
LG&E	TODS	2015/10	802	906
LG&E	TODS	2015/11	822	906

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	843	906
LG&E	TODS	2016/01	717	906
LG&E	TODS	2016/02	819	906
LG&E	TODS	2016/03	822	906
LG&E	TODS	2016/04	840	906
LG&E	TODS	2016/05	797	906
LG&E	TODS	2016/06	843	906
LG&E	TODS	2016/07	896	896
LG&E	TODS	2016/08	851	896
LG&E	TODS	2015/09	1,278	1,355
LG&E	TODS	2015/10	1,301	1,355
LG&E	TODS	2015/11	1,162	1,355
LG&E	TODS	2015/12	1,138	1,355
LG&E	TODS	2016/01	1,064	1,355
LG&E	TODS	2016/02	1,056	1,355
LG&E	TODS	2016/03	1,016	1,355
LG&E	TODS	2016/04	1,016	1,355
LG&E	TODS	2016/05	1,016	1,355
LG&E	TODS	2016/06	1,074	1,355
LG&E	TODS	2016/07	1,165	1,355
LG&E	TODS	2016/08	1,283	1,301
LG&E	TODS	2015/09	533	535
LG&E	TODS	2015/10	548	548
LG&E	TODS	2015/11	515	548
LG&E	TODS	2015/12	501	548
LG&E	TODS	2016/01	500	548
LG&E	TODS	2016/02	522	548
LG&E	TODS	2016/03	520	548
LG&E	TODS	2016/04	486	548
LG&E	TODS	2016/05	461	548
LG&E	TODS	2016/06	486	548
LG&E	TODS	2016/07	493	548
LG&E	TODS	2016/08	529	548
LG&E	TODS	2015/09	621	654
LG&E	TODS	2015/10	611	654
LG&E	TODS	2015/11	595	654
LG&E	TODS	2015/12	542	654
LG&E	TODS	2016/01	539	654
LG&E	TODS	2016/02	514	654
LG&E	TODS	2016/03	514	654
LG&E	TODS	2016/04	563	654
LG&E	TODS	2016/05	637	654
LG&E	TODS	2016/06	586	654

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	693	693
LG&E	TODS	2016/08	736	736
LG&E	TODS	2015/09	294	325
LG&E	TODS	2015/10	300	325
LG&E	TODS	2015/11	277	325
LG&E	TODS	2015/12	275	325
LG&E	TODS	2016/01	265	325
LG&E	TODS	2016/02	269	325
LG&E	TODS	2016/03	269	325
LG&E	TODS	2016/04	263	325
LG&E	TODS	2016/05	250	325
LG&E	TODS	2016/06	250	325
LG&E	TODS	2016/07	275	325
LG&E	TODS	2016/08	280	325
LG&E	TODP	2015/09	1,638	1,681
LG&E	TODP	2015/10	1,579	1,681
LG&E	TODP	2015/11	1,642	1,681
LG&E	TODP	2015/12	1,571	1,681
LG&E	TODP	2016/01	1,558	1,681
LG&E	TODP	2016/02	1,524	1,681
LG&E	TODP	2016/03	1,613	1,681
LG&E	TODP	2016/04	1,612	1,681
LG&E	TODP	2016/05	1,633	1,681
LG&E	TODP	2016/06	1,653	1,681
LG&E	TODP	2016/07	1,654	1,654
LG&E	TODP	2016/08	1,667	1,667
LG&E	TODP	2015/09	1,820	1,820
LG&E	TODP	2015/10	1,766	1,820
LG&E	TODP	2015/11	1,757	1,820
LG&E	TODP	2015/12	1,906	1,906
LG&E	TODP	2016/01	1,965	1,965
LG&E	TODP	2016/02	1,935	1,965
LG&E	TODP	2016/03	1,830	1,965
LG&E	TODP	2016/04	1,877	1,965
LG&E	TODP	2016/05	1,820	1,965
LG&E	TODP	2016/06	1,833	1,965
LG&E	TODP	2016/07	1,911	1,965
LG&E	TODP	2016/08	2,083	2,083
LG&E	TODS	2015/09	580	715
LG&E	TODS	2015/10	536	715
LG&E	TODS	2015/11	536	715
LG&E	TODS	2015/12	536	715
LG&E	TODS	2016/01	581	715

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	580	715
LG&E	TODS	2016/03	563	715
LG&E	TODS	2016/04	565	715
LG&E	TODS	2016/05	594	715
LG&E	TODS	2016/06	630	715
LG&E	TODS	2016/07	752	752
LG&E	TODS	2016/08	774	774
LG&E	TODS	2015/09	787	910
LG&E	TODS	2015/10	743	910
LG&E	TODS	2015/11	683	910
LG&E	TODS	2015/12	683	910
LG&E	TODS	2016/01	683	910
LG&E	TODS	2016/02	683	910
LG&E	TODS	2016/03	683	910
LG&E	TODS	2016/04	683	910
LG&E	TODS	2016/05	723	910
LG&E	TODS	2016/06	853	892
LG&E	TODS	2016/07	928	928
LG&E	TODS	2016/08	926	928
LG&E	TODS	2015/09	526	587
LG&E	TODS	2015/10	482	587
LG&E	TODS	2015/11	475	587
LG&E	TODS	2015/12	440	587
LG&E	TODS	2016/01	448	587
LG&E	TODS	2016/02	440	587
LG&E	TODS	2016/03	440	587
LG&E	TODS	2016/04	440	587
LG&E	TODS	2016/05	485	587
LG&E	TODS	2016/06	528	587
LG&E	TODS	2016/07	554	587
LG&E	TODS	2016/08	563	563
LG&E	TODP	2015/09	3,653	3,653
LG&E	TODP	2015/10	3,398	3,653
LG&E	TODP	2015/11	2,972	3,653
LG&E	TODP	2015/12	2,740	3,653
LG&E	TODP	2016/01	2,740	3,653
LG&E	TODP	2016/02	2,740	3,653
LG&E	TODP	2016/03	2,740	3,653
LG&E	TODP	2016/04	2,835	3,653
LG&E	TODP	2016/05	3,143	3,653
LG&E	TODP	2016/06	3,440	3,653
LG&E	TODP	2016/07	3,515	3,653
LG&E	TODP	2016/08	3,505	3,653

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/09	306	307
LG&E	TODS	2015/10	296	307
LG&E	TODS	2015/11	282	307
LG&E	TODS	2015/12	298	307
LG&E	TODS	2016/01	300	307
LG&E	TODS	2016/02	250	307
LG&E	TODS	2016/03	250	307
LG&E	TODS	2016/04	250	307
LG&E	TODS	2016/05	265	307
LG&E	TODS	2016/06	283	307
LG&E	TODS	2016/07	326	326
LG&E	TODS	2016/08	318	326
LG&E	TODS	2015/09	420	420
LG&E	TODS	2015/10	348	420
LG&E	TODS	2015/11	330	420
LG&E	TODS	2015/12	315	420
LG&E	TODS	2016/01	315	420
LG&E	TODS	2016/02	315	420
LG&E	TODS	2016/03	351	420
LG&E	TODS	2016/04	320	420
LG&E	TODS	2016/05	329	420
LG&E	TODS	2016/06	357	420
LG&E	TODS	2016/07	361	420
LG&E	TODS	2016/08	368	420
LG&E	RTS	2015/09	31,983	32,296
LG&E	RTS	2015/10	32,180	32,296
LG&E	RTS	2015/11	32,340	32,340
LG&E	RTS	2015/12	32,216	32,340
LG&E	RTS	2016/01	31,609	32,340
LG&E	RTS	2016/02	24,255	32,340
LG&E	RTS	2016/03	32,204	32,340
LG&E	RTS	2016/04	32,338	32,340
LG&E	RTS	2016/05	32,040	32,340
LG&E	RTS	2016/06	31,665	32,340
LG&E	RTS	2016/07	31,481	32,340
LG&E	RTS	2016/08	31,765	32,340
LG&E	TODS	2015/09	2,241	2,493
LG&E	TODS	2015/10	2,126	2,493
LG&E	TODS	2015/11	2,109	2,493
LG&E	TODS	2015/12	2,063	2,493
LG&E	TODS	2016/01	1,982	2,493
LG&E	TODS	2016/02	1,927	2,493
LG&E	TODS	2016/03	2,115	2,493

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/04	1,995	2,493
LG&E	TODS	2016/05	2,107	2,493
LG&E	TODS	2016/06	2,373	2,493
LG&E	TODS	2016/07	2,458	2,493
LG&E	TODS	2016/08	2,401	2,458
LG&E	TODS	2015/09	731	850
LG&E	TODS	2015/10	668	850
LG&E	TODS	2015/11	698	850
LG&E	TODS	2015/12	739	850
LG&E	TODS	2016/01	647	850
LG&E	TODS	2016/02	641	850
LG&E	TODS	2016/03	674	850
LG&E	TODS	2016/04	660	850
LG&E	TODS	2016/05	765	850
LG&E	TODS	2016/06	712	850
LG&E	TODS	2016/07	727	850
LG&E	TODS	2016/08	829	850
LG&E	TODS	2016/08	421	421
LG&E	TODP	2015/09	5,633	7,307
LG&E	TODP	2015/10	5,480	7,307
LG&E	TODP	2015/11	5,480	7,307
LG&E	TODP	2015/12	5,480	7,307
LG&E	TODP	2016/01	5,340	5,633
LG&E	TODP	2016/02	4,987	5,633
LG&E	TODP	2016/03	5,123	5,633
LG&E	TODP	2016/04	4,829	5,633
LG&E	TODP	2016/05	4,865	5,633
LG&E	TODP	2016/06	4,978	5,633
LG&E	TODP	2016/07	4,753	5,633
LG&E	TODP	2016/08	4,621	5,633
LG&E	TODS	2015/09	1,077	1,123
LG&E	TODS	2015/10	1,075	1,123
LG&E	TODS	2015/11	982	1,123
LG&E	TODS	2015/12	917	1,123
LG&E	TODS	2016/01	848	1,123
LG&E	TODS	2016/02	842	1,123
LG&E	TODS	2016/03	842	1,123
LG&E	TODS	2016/04	880	1,123
LG&E	TODS	2016/05	973	1,123
LG&E	TODS	2016/06	1,062	1,123
LG&E	TODS	2016/07	1,125	1,125
LG&E	TODS	2016/08	1,093	1,125
LG&E	TODP	2015/09	2,118	2,188

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/10	2,039	2,188
LG&E	TODP	2015/11	2,020	2,188
LG&E	TODP	2015/12	2,004	2,188
LG&E	TODP	2016/01	1,915	2,188
LG&E	TODP	2016/02	1,930	2,188
LG&E	TODP	2016/03	1,830	2,188
LG&E	TODP	2016/04	1,973	2,188
LG&E	TODP	2016/05	1,816	2,188
LG&E	TODP	2016/06	2,006	2,188
LG&E	TODP	2016/07	2,102	2,188
LG&E	TODP	2016/08	2,206	2,206
LG&E	TODS	2015/09	383	450
LG&E	TODS	2015/10	395	450
LG&E	TODS	2015/11	344	450
LG&E	TODS	2015/12	338	450
LG&E	TODS	2016/01	338	450
LG&E	TODS	2016/02	338	450
LG&E	TODS	2016/03	338	450
LG&E	TODS	2016/04	338	450
LG&E	TODS	2016/05	338	450
LG&E	TODS	2016/06	362	450
LG&E	TODS	2016/07	375	450
LG&E	TODS	2016/08	472	472
LG&E	TODS	2015/09	374	450
LG&E	TODS	2015/10	338	450
LG&E	TODS	2015/11	338	450
LG&E	TODS	2015/12	338	450
LG&E	TODS	2016/01	338	450
LG&E	TODS	2016/02	338	450
LG&E	TODS	2016/03	338	450
LG&E	TODS	2016/04	402	450
LG&E	TODS	2016/05	338	450
LG&E	TODS	2016/06	432	450
LG&E	TODS	2016/07	429	450
LG&E	TODS	2016/08	453	453
LG&E	TODS	2015/09	421	475
LG&E	TODS	2015/10	356	475
LG&E	TODS	2015/11	356	475
LG&E	TODS	2015/12	356	475
LG&E	TODS	2016/01	356	475
LG&E	TODS	2016/02	356	475
LG&E	TODS	2016/03	356	475
LG&E	TODS	2016/04	356	475

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	356	475
LG&E	TODS	2016/06	451	475
LG&E	TODS	2016/07	479	479
LG&E	TODS	2016/08	459	479
LG&E	TODS	2015/09	462	501
LG&E	TODS	2015/10	416	501
LG&E	TODS	2015/11	376	501
LG&E	TODS	2015/12	376	501
LG&E	TODS	2016/01	376	501
LG&E	TODS	2016/02	376	501
LG&E	TODS	2016/03	376	501
LG&E	TODS	2016/04	376	501
LG&E	TODS	2016/05	376	501
LG&E	TODS	2016/06	419	501
LG&E	TODS	2016/07	462	501
LG&E	TODS	2016/08	469	469
LG&E	TODS	2015/09	250	291
LG&E	TODS	2015/10	266	291
LG&E	TODS	2015/11	250	291
LG&E	TODS	2015/12	255	291
LG&E	TODS	2016/01	250	291
LG&E	TODS	2016/02	279	291
LG&E	TODS	2016/03	287	291
LG&E	TODS	2016/04	270	291
LG&E	TODS	2016/05	278	291
LG&E	TODS	2016/06	262	291
LG&E	TODS	2016/07	310	310
LG&E	TODS	2016/08	296	310
LG&E	TODP	2015/09	2,983	3,318
LG&E	TODP	2015/10	2,728	3,318
LG&E	TODP	2015/11	2,991	3,318
LG&E	TODP	2015/12	3,033	3,318
LG&E	TODP	2016/01	3,154	3,318
LG&E	TODP	2016/02	3,110	3,318
LG&E	TODP	2016/03	2,957	3,318
LG&E	TODP	2016/04	2,989	3,318
LG&E	TODP	2016/05	2,989	3,318
LG&E	TODP	2016/06	2,946	3,318
LG&E	TODP	2016/07	2,794	3,154
LG&E	TODP	2016/08	2,922	3,154
LG&E	TODS	2015/09	337	448
LG&E	TODS	2015/10	398	448
LG&E	TODS	2015/11	403	448

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	453	453
LG&E	TODS	2016/01	400	453
LG&E	TODS	2016/02	406	453
LG&E	TODS	2016/03	379	453
LG&E	TODS	2016/04	374	453
LG&E	TODS	2016/05	362	453
LG&E	TODS	2016/06	374	453
LG&E	TODS	2016/07	388	453
LG&E	TODS	2016/08	352	453
LG&E	TODP	2015/09	22,259	23,140
LG&E	TODP	2015/10	22,238	23,140
LG&E	TODP	2015/11	21,521	23,140
LG&E	TODP	2015/12	23,207	23,207
LG&E	TODP	2016/01	23,336	23,336
LG&E	TODP	2016/02	23,202	23,336
LG&E	TODP	2016/03	22,652	23,336
LG&E	TODP	2016/04	22,603	23,336
LG&E	TODP	2016/05	23,159	23,336
LG&E	TODP	2016/06	23,728	23,728
LG&E	TODP	2016/07	24,673	24,673
LG&E	TODP	2016/08	24,502	24,673
LG&E	TODP	2015/09	1,003	1,003
LG&E	TODP	2015/10	1,012	1,012
LG&E	TODP	2015/11	1,030	1,030
LG&E	TODP	2015/12	772	1,030
LG&E	TODP	2016/01	772	1,030
LG&E	TODP	2016/02	772	1,030
LG&E	TODP	2016/03	1,018	1,030
LG&E	TODP	2016/04	1,021	1,030
LG&E	TODP	2016/05	982	1,030
LG&E	TODP	2016/06	772	1,030
LG&E	TODP	2016/07	827	1,030
LG&E	TODP	2016/08	976	1,030
LG&E	TODP	2015/09	2,969	3,100
LG&E	TODP	2015/10	2,705	3,100
LG&E	TODP	2015/11	2,325	3,100
LG&E	TODP	2015/12	2,325	3,100
LG&E	TODP	2016/01	2,325	3,100
LG&E	TODP	2016/02	2,325	3,100
LG&E	TODP	2016/03	2,342	3,100
LG&E	TODP	2016/04	2,325	3,100
LG&E	TODP	2016/05	2,365	3,100
LG&E	TODP	2016/06	2,738	3,100

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/07	2,877	3,100
LG&E	TODP	2016/08	2,890	2,969
LG&E	TODP	2015/09	10,259	10,259
LG&E	TODP	2015/10	8,277	10,259
LG&E	TODP	2015/11	8,779	10,259
LG&E	TODP	2015/12	8,052	10,259
LG&E	TODP	2016/01	8,508	10,259
LG&E	TODP	2016/02	8,864	10,259
LG&E	TODP	2016/03	8,766	10,259
LG&E	TODP	2016/04	8,505	10,259
LG&E	TODP	2016/05	8,325	10,259
LG&E	TODP	2016/06	9,346	10,259
LG&E	TODP	2016/07	9,589	10,259
LG&E	TODP	2016/08	9,691	10,259
LG&E	TODP	2015/09	16,393	16,393
LG&E	TODP	2015/10	14,433	16,393
LG&E	TODP	2015/11	13,937	16,393
LG&E	TODP	2015/12	16,048	16,393
LG&E	TODP	2016/01	14,817	16,393
LG&E	TODP	2016/02	16,307	16,393
LG&E	TODP	2016/03	15,740	16,393
LG&E	TODP	2016/04	14,118	16,393
LG&E	TODP	2016/05	14,904	16,393
LG&E	TODP	2016/06	17,006	17,006
LG&E	TODP	2016/07	15,589	17,006
LG&E	TODP	2016/08	15,906	17,006
LG&E	TODP	2015/09	7,191	7,335
LG&E	TODP	2015/10	7,408	7,408
LG&E	TODP	2015/11	6,884	7,408
LG&E	TODP	2015/12	7,127	7,408
LG&E	TODP	2016/01	6,724	7,408
LG&E	TODP	2016/02	6,963	7,408
LG&E	TODP	2016/03	6,783	7,408
LG&E	TODP	2016/04	7,290	7,408
LG&E	TODP	2016/05	7,408	7,408
LG&E	TODP	2016/06	7,407	7,408
LG&E	TODP	2016/07	8,197	8,197
LG&E	TODP	2016/08	7,735	8,197
LG&E	TODS	2015/09	309	309
LG&E	TODS	2015/10	289	309
LG&E	TODS	2015/11	295	309
LG&E	TODS	2015/12	250	309
LG&E	TODS	2016/01	250	309

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	250	309
LG&E	TODS	2016/03	252	309
LG&E	TODS	2016/04	260	309
LG&E	TODS	2016/05	282	309
LG&E	TODS	2016/06	319	319
LG&E	TODS	2016/07	296	319
LG&E	TODS	2016/08	301	319
LG&E	TODS	2015/09	250	263
LG&E	TODS	2015/10	250	263
LG&E	TODS	2015/11	250	263
LG&E	TODS	2015/12	250	263
LG&E	TODS	2016/01	250	263
LG&E	TODS	2016/02	250	263
LG&E	TODS	2016/03	250	263
LG&E	TODS	2016/04	250	263
LG&E	TODS	2016/05	250	263
LG&E	TODS	2016/06	250	263
LG&E	TODS	2016/07	250	263
LG&E	TODS	2016/08	250	263
LG&E	TODS	2015/09	1,567	2,090
LG&E	TODS	2015/10	1,567	2,090
LG&E	TODS	2015/11	1,567	2,090
LG&E	TODS	2015/12	1,591	2,090
LG&E	TODS	2016/01	1,690	2,090
LG&E	TODS	2016/02	1,999	2,067
LG&E	TODS	2016/03	1,863	1,999
LG&E	TODS	2016/04	1,658	1,999
LG&E	TODS	2016/05	1,500	1,999
LG&E	TODS	2016/06	1,500	1,999
LG&E	TODS	2016/07	1,500	1,999
LG&E	TODS	2016/08	1,500	1,999
LG&E	TODS	2015/09	498	534
LG&E	TODS	2015/10	488	534
LG&E	TODS	2015/11	440	534
LG&E	TODS	2015/12	401	534
LG&E	TODS	2016/01	401	534
LG&E	TODS	2016/02	401	534
LG&E	TODS	2016/03	424	534
LG&E	TODS	2016/04	402	534
LG&E	TODS	2016/05	464	534
LG&E	TODS	2016/06	520	534
LG&E	TODS	2016/07	527	534
LG&E	TODS	2016/08	552	552

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/09	1,519	1,648
LG&E	TODS	2015/10	1,439	1,648
LG&E	TODS	2015/11	1,361	1,648
LG&E	TODS	2015/12	1,321	1,648
LG&E	TODS	2016/01	1,236	1,648
LG&E	TODS	2016/02	1,236	1,648
LG&E	TODS	2016/03	1,236	1,648
LG&E	TODS	2016/04	1,242	1,648
LG&E	TODS	2016/05	1,398	1,648
LG&E	TODS	2016/06	1,520	1,648
LG&E	TODS	2016/07	1,615	1,615
LG&E	TODS	2016/08	1,744	1,744
LG&E	TODS	2015/09	2,014	2,081
LG&E	TODS	2015/10	2,114	2,114
LG&E	TODS	2015/11	2,045	2,114
LG&E	TODS	2015/12	1,908	2,114
LG&E	TODS	2016/01	1,944	2,114
LG&E	TODS	2016/02	2,057	2,114
LG&E	TODS	2016/03	1,997	2,114
LG&E	TODS	2016/04	2,014	2,114
LG&E	TODS	2016/05	2,136	2,136
LG&E	TODS	2016/06	2,069	2,136
LG&E	TODS	2016/07	2,141	2,141
LG&E	TODS	2016/08	2,282	2,282
LG&E	TODS	2015/09	350	352
LG&E	TODS	2015/10	347	352
LG&E	TODS	2015/11	346	352
LG&E	TODS	2015/12	351	352
LG&E	TODS	2016/01	347	352
LG&E	TODS	2016/02	349	352
LG&E	TODS	2016/03	346	352
LG&E	TODS	2016/04	351	352
LG&E	TODS	2016/05	346	352
LG&E	TODS	2016/06	335	352
LG&E	TODS	2016/07	337	352
LG&E	TODS	2016/08	334	351
LG&E	TODS	2015/09	517	561
LG&E	TODS	2015/10	424	561
LG&E	TODS	2015/11	420	561
LG&E	TODS	2015/12	420	561
LG&E	TODS	2016/01	420	561
LG&E	TODS	2016/02	420	561
LG&E	TODS	2016/03	420	561

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/04	420	561
LG&E	TODS	2016/05	435	561
LG&E	TODS	2016/06	517	561
LG&E	TODS	2016/07	536	561
LG&E	TODS	2016/08	554	554
LG&E	TODS	2015/09	626	626
LG&E	TODS	2015/10	599	626
LG&E	TODS	2015/11	522	626
LG&E	TODS	2015/12	469	626
LG&E	TODS	2016/01	469	626
LG&E	TODS	2016/02	469	626
LG&E	TODS	2016/03	493	626
LG&E	TODS	2016/04	469	626
LG&E	TODS	2016/05	559	626
LG&E	TODS	2016/06	643	643
LG&E	TODS	2016/07	634	643
LG&E	TODS	2016/08	614	643
LG&E	TODS	2015/09	257	300
LG&E	TODS	2015/10	250	300
LG&E	TODS	2015/11	250	300
LG&E	TODS	2015/12	250	300
LG&E	TODS	2016/01	250	300
LG&E	TODS	2016/02	250	300
LG&E	TODS	2016/03	250	300
LG&E	TODS	2016/04	250	300
LG&E	TODS	2016/05	250	300
LG&E	TODS	2016/06	250	300
LG&E	TODS	2016/07	250	300
LG&E	TODS	2016/08	258	300
LG&E	TODS	2015/09	366	419
LG&E	TODS	2015/10	314	419
LG&E	TODS	2015/11	314	419
LG&E	TODS	2015/12	314	419
LG&E	TODS	2016/01	314	419
LG&E	TODS	2016/02	314	419
LG&E	TODS	2016/03	314	419
LG&E	TODS	2016/04	314	419
LG&E	TODS	2016/05	317	419
LG&E	TODS	2016/06	341	419
LG&E	TODS	2016/07	408	408
LG&E	TODS	2016/08	448	448
LG&E	TODS	2015/09	984	1,100
LG&E	TODS	2015/10	930	1,100

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/11	885	1,100
LG&E	TODS	2015/12	838	1,100
LG&E	TODS	2016/01	883	1,100
LG&E	TODS	2016/02	859	1,100
LG&E	TODS	2016/03	878	1,100
LG&E	TODS	2016/04	862	1,100
LG&E	TODS	2016/05	942	1,100
LG&E	TODS	2016/06	923	1,100
LG&E	TODS	2016/07	942	1,100
LG&E	TODS	2016/08	1,061	1,100
LG&E	TODS	2015/09	250	280
LG&E	TODS	2015/10	250	280
LG&E	TODS	2015/11	250	280
LG&E	TODS	2015/12	250	280
LG&E	TODS	2016/01	250	280
LG&E	TODS	2015/09	526	648
LG&E	TODS	2015/10	504	648
LG&E	TODS	2015/11	486	648
LG&E	TODS	2015/12	486	648
LG&E	TODS	2016/01	493	648
LG&E	TODS	2016/02	486	648
LG&E	TODS	2016/03	486	648
LG&E	TODS	2016/04	486	648
LG&E	TODS	2016/05	486	648
LG&E	TODS	2016/06	486	648
LG&E	TODS	2016/07	486	648
LG&E	TODS	2016/08	492	648
LG&E	TODS	2015/09	296	296
LG&E	TODS	2015/10	269	296
LG&E	TODS	2015/11	269	296
LG&E	TODS	2015/12	265	296
LG&E	TODS	2016/01	288	296
LG&E	TODS	2016/02	292	296
LG&E	TODS	2016/03	269	296
LG&E	TODS	2016/04	265	296
LG&E	TODS	2016/05	280	296
LG&E	TODS	2016/06	277	296
LG&E	TODS	2016/07	303	303
LG&E	TODS	2016/08	303	303
LG&E	TODS	2015/09	250	250
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/11	250	250
LG&E	TODS	2015/12	250	250

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2015/09	345	398
LG&E	TODS	2015/10	306	398
LG&E	TODS	2015/11	298	398
LG&E	TODS	2015/12	298	398
LG&E	TODS	2016/01	298	398
LG&E	TODS	2016/02	298	398
LG&E	TODS	2016/03	298	398
LG&E	TODS	2016/04	298	398
LG&E	TODS	2016/05	298	398
LG&E	TODS	2016/06	331	391
LG&E	TODS	2016/07	391	391
LG&E	TODS	2016/08	386	391
LG&E	TODS	2015/09	691	723
LG&E	TODS	2015/10	598	723
LG&E	TODS	2015/11	557	723
LG&E	TODS	2015/12	542	723
LG&E	TODS	2016/01	542	723
LG&E	TODS	2016/02	542	723
LG&E	TODS	2016/03	542	723
LG&E	TODS	2016/04	542	723
LG&E	TODS	2016/05	592	723
LG&E	TODS	2016/06	710	723
LG&E	TODS	2016/07	712	723
LG&E	TODS	2016/08	730	730
LG&E	TODS	2015/09	670	696
LG&E	TODS	2015/10	613	696
LG&E	TODS	2015/11	541	696
LG&E	TODS	2015/12	522	696
LG&E	TODS	2016/01	522	696
LG&E	TODS	2016/02	522	696
LG&E	TODS	2016/03	522	696
LG&E	TODS	2016/04	522	696
LG&E	TODS	2016/05	552	696
LG&E	TODS	2016/06	660	696
LG&E	TODS	2016/07	689	696

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/08	716	716
LG&E	TODS	2015/09	1,125	1,500
LG&E	TODS	2015/10	1,125	1,500
LG&E	TODS	2015/11	1,125	1,500
LG&E	TODS	2015/12	1,125	1,500
LG&E	TODS	2016/01	1,125	1,500
LG&E	TODS	2016/02	1,125	1,500
LG&E	TODS	2016/03	1,125	1,500
LG&E	TODS	2016/04	1,125	1,500
LG&E	TODS	2016/05	1,125	1,500
LG&E	TODS	2016/06	1,125	1,500
LG&E	TODS	2016/07	1,162	1,500
LG&E	TODS	2016/08	1,210	1,500
LG&E	TODP	2015/09	399	413
LG&E	TODP	2015/10	394	413
LG&E	TODP	2015/11	381	413
LG&E	TODP	2015/12	376	413
LG&E	TODP	2016/01	381	413
LG&E	TODP	2016/02	378	413
LG&E	TODP	2016/03	381	413
LG&E	TODP	2016/04	384	413
LG&E	TODP	2016/05	392	413
LG&E	TODP	2016/06	403	413
LG&E	TODP	2016/07	406	408
LG&E	TODP	2016/08	401	406
LG&E	TODS	2015/09	1,279	1,279
LG&E	TODS	2015/10	1,275	1,279
LG&E	TODS	2015/11	1,279	1,279
LG&E	TODS	2015/12	1,293	1,293
LG&E	TODS	2016/01	1,280	1,293
LG&E	TODS	2016/02	1,297	1,297
LG&E	TODS	2016/03	1,345	1,345
LG&E	TODS	2016/04	1,338	1,345
LG&E	TODS	2016/05	1,315	1,345
LG&E	TODS	2016/06	1,310	1,345
LG&E	TODS	2016/07	1,325	1,345
LG&E	TODS	2016/08	1,308	1,345
LG&E	RTS	2015/09	2,237	2,982
LG&E	RTS	2015/10	2,237	2,982
LG&E	RTS	2015/11	2,237	2,982
LG&E	RTS	2015/12	2,237	2,982
LG&E	RTS	2016/01	2,978	2,982
LG&E	RTS	2016/02	2,237	2,982

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	RTS	2016/03	2,237	2,982
LG&E	RTS	2016/04	2,233	2,978
LG&E	RTS	2016/05	2,233	2,978
LG&E	RTS	2016/06	2,233	2,978
LG&E	RTS	2016/07	2,233	2,978
LG&E	RTS	2016/08	2,233	2,978
LG&E	TODS	2015/09	250	300
LG&E	TODS	2015/10	250	300
LG&E	TODP	2015/09	11,041	12,021
LG&E	TODP	2015/10	10,926	12,021
LG&E	TODP	2015/11	10,881	12,021
LG&E	TODP	2015/12	11,010	12,021
LG&E	TODP	2016/01	10,548	12,021
LG&E	TODP	2016/02	10,940	12,021
LG&E	TODP	2016/03	11,802	12,021
LG&E	TODP	2016/04	11,788	12,021
LG&E	TODP	2016/05	11,711	12,021
LG&E	TODP	2016/06	11,980	11,980
LG&E	TODP	2016/07	12,107	12,107
LG&E	TODP	2016/08	11,644	12,107
LG&E	TODP	2015/09	306	367
LG&E	TODP	2015/10	319	339
LG&E	TODP	2015/11	285	319
LG&E	TODP	2015/12	272	319
LG&E	TODP	2016/01	251	319
LG&E	TODP	2016/02	265	319
LG&E	TODP	2016/03	258	319
LG&E	TODP	2016/04	272	319
LG&E	TODP	2016/05	258	319
LG&E	TODP	2016/06	272	319
LG&E	TODP	2016/07	285	319
LG&E	TODP	2016/08	299	319
LG&E	TODS	2015/09	686	750
LG&E	TODS	2015/10	708	750
LG&E	TODS	2015/11	744	750
LG&E	TODS	2015/12	714	750
LG&E	TODS	2016/01	706	750
LG&E	TODS	2016/02	734	750
LG&E	TODS	2016/03	733	750
LG&E	TODS	2016/04	761	761
LG&E	TODS	2016/05	764	764
LG&E	TODS	2016/06	765	765
LG&E	TODS	2016/07	776	776

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/08	788	788
LG&E	TODS	2015/09	1,709	1,762
LG&E	TODS	2015/10	1,752	1,762
LG&E	TODS	2015/11	1,834	1,834
LG&E	TODS	2015/12	1,812	1,834
LG&E	TODS	2016/01	1,726	1,834
LG&E	TODS	2016/02	1,649	1,834
LG&E	TODS	2016/03	1,673	1,834
LG&E	TODS	2016/04	1,687	1,834
LG&E	TODS	2016/05	1,759	1,834
LG&E	TODS	2016/06	1,788	1,834
LG&E	TODS	2016/07	1,891	1,891
LG&E	TODS	2016/08	1,752	1,891
LG&E	TODS	2015/09	491	491
LG&E	TODS	2015/10	438	491
LG&E	TODS	2015/11	408	491
LG&E	TODS	2015/12	394	491
LG&E	TODS	2016/01	406	491
LG&E	TODS	2016/02	381	491
LG&E	TODS	2016/03	399	491
LG&E	TODS	2016/04	403	491
LG&E	TODS	2016/05	428	491
LG&E	TODS	2016/06	478	491
LG&E	TODS	2016/07	494	494
LG&E	TODS	2016/08	502	502
LG&E	TODP	2015/09	495	511
LG&E	TODP	2015/10	418	511
LG&E	TODP	2015/11	403	511
LG&E	TODP	2015/12	384	511
LG&E	TODP	2016/01	384	511
LG&E	TODP	2016/02	384	511
LG&E	TODP	2016/03	437	511
LG&E	TODP	2016/04	430	511
LG&E	TODP	2016/05	448	511
LG&E	TODP	2016/06	494	511
LG&E	TODP	2016/07	537	537
LG&E	TODP	2016/08	501	537
LG&E	TODP	2015/09	571	601
LG&E	TODP	2015/10	534	601
LG&E	TODP	2015/11	510	601
LG&E	TODP	2015/12	498	601
LG&E	TODP	2016/01	451	601
LG&E	TODP	2016/02	471	601

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/03	512	601
LG&E	TODP	2016/04	549	601
LG&E	TODP	2016/05	551	601
LG&E	TODP	2016/06	626	626
LG&E	TODP	2016/07	636	636
LG&E	TODP	2016/08	635	636
LG&E	TODS	2015/09	358	370
LG&E	TODS	2015/10	291	370
LG&E	TODS	2015/11	278	370
LG&E	TODS	2015/12	278	370
LG&E	TODS	2016/01	278	370
LG&E	TODS	2016/02	278	370
LG&E	TODS	2016/03	278	370
LG&E	TODS	2016/04	278	370
LG&E	TODS	2016/05	278	370
LG&E	TODS	2016/06	358	370
LG&E	TODS	2016/07	353	368
LG&E	TODS	2016/08	358	358
LG&E	TODS	2015/09	438	456
LG&E	TODS	2015/10	383	456
LG&E	TODS	2015/11	342	456
LG&E	TODS	2015/12	342	456
LG&E	TODS	2016/01	342	456
LG&E	TODS	2016/02	342	456
LG&E	TODS	2016/03	342	456
LG&E	TODS	2016/04	342	456
LG&E	TODS	2016/05	347	456
LG&E	TODS	2016/06	474	474
LG&E	TODS	2016/07	474	474
LG&E	TODS	2016/08	474	474
LG&E	TODP	2015/09	4,122	4,122
LG&E	TODP	2015/10	4,109	4,122
LG&E	TODP	2015/11	4,019	4,122
LG&E	TODP	2015/12	3,984	4,122
LG&E	TODP	2016/01	3,976	4,122
LG&E	TODP	2016/02	4,019	4,122
LG&E	TODP	2016/03	4,019	4,122
LG&E	TODP	2016/04	4,001	4,122
LG&E	TODP	2016/05	3,989	4,122
LG&E	TODP	2016/06	4,049	4,122
LG&E	TODP	2016/07	4,083	4,122
LG&E	TODP	2016/08	4,212	4,212
LG&E	TODP	2015/09	2,093	2,166

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/10	1,940	2,166
LG&E	TODP	2015/11	2,020	2,166
LG&E	TODP	2015/12	2,037	2,166
LG&E	TODP	2016/01	2,007	2,166
LG&E	TODP	2016/02	2,085	2,166
LG&E	TODP	2016/03	1,997	2,166
LG&E	TODP	2016/04	1,944	2,166
LG&E	TODP	2016/05	1,996	2,166
LG&E	TODP	2016/06	2,090	2,166
LG&E	TODP	2016/07	2,162	2,166
LG&E	TODP	2016/08	2,264	2,264
LG&E	TODS	2015/09	1,144	1,160
LG&E	TODS	2015/10	870	1,160
LG&E	TODS	2015/11	870	1,160
LG&E	TODS	2015/12	870	1,160
LG&E	TODS	2016/01	870	1,160
LG&E	TODS	2016/02	870	1,160
LG&E	TODS	2016/03	870	1,160
LG&E	TODS	2016/04	886	1,160
LG&E	TODS	2016/05	870	1,160
LG&E	TODS	2016/06	1,096	1,160
LG&E	TODS	2016/07	1,117	1,160
LG&E	TODS	2016/08	1,150	1,150
LG&E	TODS	2015/09	418	489
LG&E	TODS	2015/10	379	489
LG&E	TODS	2015/11	367	489
LG&E	TODS	2015/12	367	489
LG&E	TODS	2016/01	367	489
LG&E	TODS	2016/02	367	489
LG&E	TODS	2016/03	367	489
LG&E	TODS	2016/04	367	489
LG&E	TODS	2016/05	367	489
LG&E	TODS	2016/06	367	489
LG&E	TODS	2016/07	445	445
LG&E	TODS	2016/08	449	449
LG&E	TODS	2015/09	305	385
LG&E	TODS	2015/10	300	385
LG&E	TODS	2015/11	294	385
LG&E	TODS	2015/12	306	385
LG&E	TODS	2016/01	299	385
LG&E	TODS	2016/02	325	385
LG&E	TODS	2016/03	376	385
LG&E	TODS	2016/04	373	385

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	361	385
LG&E	TODS	2016/06	392	392
LG&E	TODS	2016/07	377	392
LG&E	TODS	2016/08	389	392
LG&E	TODS	2015/09	378	384
LG&E	TODS	2015/10	349	384
LG&E	TODS	2015/11	325	384
LG&E	TODS	2015/12	342	384
LG&E	TODS	2016/01	339	384
LG&E	TODS	2016/02	365	384
LG&E	TODS	2016/03	365	384
LG&E	TODS	2016/04	338	384
LG&E	TODS	2016/05	370	384
LG&E	TODS	2016/06	371	384
LG&E	TODS	2016/07	379	384
LG&E	TODS	2016/08	382	382
LG&E	TODS	2015/09	1,032	1,142
LG&E	TODS	2015/10	1,037	1,142
LG&E	TODS	2015/11	857	1,142
LG&E	TODS	2015/12	857	1,142
LG&E	TODS	2016/01	898	1,142
LG&E	TODS	2016/02	1,114	1,142
LG&E	TODS	2016/03	1,032	1,142
LG&E	TODS	2016/04	857	1,142
LG&E	TODS	2016/05	857	1,142
LG&E	TODS	2016/06	878	1,142
LG&E	TODS	2016/07	1,080	1,142
LG&E	TODS	2016/08	1,186	1,186
LG&E	TODS	2015/09	1,200	1,296
LG&E	TODS	2015/10	1,157	1,296
LG&E	TODS	2015/11	972	1,296
LG&E	TODS	2015/12	972	1,296
LG&E	TODS	2016/01	972	1,296
LG&E	TODS	2016/02	1,181	1,296
LG&E	TODS	2016/03	1,166	1,296
LG&E	TODS	2016/04	972	1,296
LG&E	TODS	2016/05	972	1,296
LG&E	TODS	2016/06	984	1,296
LG&E	TODS	2016/07	1,205	1,296
LG&E	TODS	2016/08	1,306	1,306
LG&E	RTS	2015/09	5,719	5,719
LG&E	RTS	2015/10	5,346	5,719
LG&E	RTS	2015/11	5,194	5,719

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	RTS	2015/12	4,399	5,719
LG&E	RTS	2016/01	4,980	5,719
LG&E	RTS	2016/02	5,261	5,719
LG&E	RTS	2016/03	4,929	5,719
LG&E	RTS	2016/04	4,289	5,719
LG&E	RTS	2016/05	4,289	5,719
LG&E	RTS	2016/06	4,289	5,719
LG&E	RTS	2016/07	4,506	5,719
LG&E	RTS	2016/08	4,320	5,719
LG&E	TODS	2015/09	366	395
LG&E	TODS	2015/10	342	395
LG&E	TODS	2015/11	326	395
LG&E	TODS	2015/12	296	395
LG&E	TODS	2016/01	296	395
LG&E	TODS	2016/02	296	395
LG&E	TODS	2016/03	296	395
LG&E	TODS	2016/04	296	395
LG&E	TODS	2016/05	347	395
LG&E	TODS	2016/06	344	395
LG&E	TODS	2016/07	376	392
LG&E	TODS	2016/08	382	382
LG&E	TODS	2015/09	579	621
LG&E	TODS	2015/10	565	621
LG&E	TODS	2015/11	557	621
LG&E	TODS	2015/12	552	584
LG&E	TODS	2016/01	507	579
LG&E	TODS	2016/02	514	579
LG&E	TODS	2016/03	515	579
LG&E	TODS	2016/04	546	579
LG&E	TODS	2016/05	520	579
LG&E	TODS	2016/06	546	579
LG&E	TODS	2016/07	587	587
LG&E	TODS	2016/08	530	587
LG&E	TODS	2015/09	2,102	2,133
LG&E	TODS	2015/10	2,120	2,133
LG&E	TODS	2015/11	2,133	2,133
LG&E	TODS	2015/12	2,130	2,133
LG&E	TODS	2016/01	1,725	2,133
LG&E	TODS	2016/02	1,872	2,133
LG&E	TODS	2016/03	1,746	2,133
LG&E	TODS	2016/04	1,675	2,133
LG&E	TODS	2016/05	1,923	2,133
LG&E	TODS	2016/06	1,962	2,133

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	2,163	2,163
LG&E	TODS	2016/08	2,208	2,208
LG&E	RTS	2015/09	38,070	49,987
LG&E	RTS	2015/10	38,391	49,987
LG&E	RTS	2015/11	37,490	49,987
LG&E	RTS	2015/12	37,490	49,987
LG&E	RTS	2016/01	37,490	49,987
LG&E	RTS	2016/02	34,500	46,000
LG&E	RTS	2016/03	37,499	46,000
LG&E	RTS	2016/04	34,500	46,000
LG&E	RTS	2016/05	34,500	46,000
LG&E	RTS	2016/06	34,500	46,000
LG&E	RTS	2016/07	34,500	46,000
LG&E	RTS	2016/08	34,500	46,000
LG&E	TODS	2015/12	877	877
LG&E	TODS	2016/01	888	888
LG&E	TODS	2016/02	906	906
LG&E	TODS	2016/03	982	982
LG&E	TODS	2016/04	998	998
LG&E	TODS	2016/05	982	998
LG&E	TODS	2016/06	805	998
LG&E	TODS	2016/07	896	998
LG&E	TODS	2016/08	901	998
LG&E	TODS	2015/12	482	482
LG&E	TODS	2016/01	478	482
LG&E	TODS	2016/02	475	482
LG&E	TODS	2016/03	477	482
LG&E	TODS	2016/04	522	522
LG&E	TODS	2016/05	730	730
LG&E	TODS	2016/06	995	995
LG&E	TODS	2016/07	870	995
LG&E	TODS	2016/08	853	995
LG&E	TODS	2015/11	280	360
LG&E	TODS	2015/12	270	360
LG&E	TODS	2016/01	270	360
LG&E	TODS	2016/02	270	360
LG&E	TODS	2016/03	270	360
LG&E	TODS	2016/04	288	360
LG&E	TODS	2016/05	270	360
LG&E	TODS	2016/06	307	360
LG&E	TODS	2016/07	270	360
LG&E	TODS	2016/08	270	360
LG&E	TODS	2015/09	501	558

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/10	463	558
LG&E	TODS	2015/11	418	558
LG&E	TODS	2015/12	418	558
LG&E	TODS	2016/01	418	558
LG&E	TODS	2016/02	418	558
LG&E	TODS	2016/03	418	558
LG&E	TODS	2016/04	418	558
LG&E	TODS	2016/05	462	558
LG&E	TODS	2016/06	488	558
LG&E	TODS	2016/07	534	558
LG&E	TODS	2016/08	531	534
LG&E	TODS	2015/09	307	350
LG&E	TODS	2015/10	286	350
LG&E	TODS	2015/11	268	350
LG&E	TODS	2015/12	270	350
LG&E	TODS	2016/01	271	350
LG&E	TODS	2016/02	263	350
LG&E	TODS	2016/03	263	350
LG&E	TODS	2016/04	276	350
LG&E	TODS	2016/05	275	350
LG&E	TODS	2016/06	306	350
LG&E	TODS	2016/07	294	350
LG&E	TODS	2016/08	309	350
LG&E	TODS	2015/09	334	361
LG&E	TODS	2015/10	271	361
LG&E	TODS	2015/11	271	361
LG&E	TODS	2015/12	274	361
LG&E	TODS	2016/01	283	361
LG&E	TODS	2016/02	271	361
LG&E	TODS	2016/03	292	361
LG&E	TODS	2016/04	280	361
LG&E	TODS	2016/05	327	361
LG&E	TODS	2016/06	347	361
LG&E	TODS	2016/07	355	361
LG&E	TODS	2016/08	351	355
LG&E	RTS	2015/09	5,613	7,485
LG&E	RTS	2015/10	5,613	7,485
LG&E	RTS	2015/11	5,613	7,485
LG&E	RTS	2015/12	5,613	7,485
LG&E	RTS	2016/01	5,613	7,485
LG&E	RTS	2016/02	5,613	7,485
LG&E	RTS	2016/03	5,613	7,485
LG&E	RTS	2016/04	3,734	4,979

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	RTS	2016/05	3,734	4,979
LG&E	RTS	2016/06	3,734	4,979
LG&E	RTS	2016/07	3,734	4,979
LG&E	RTS	2016/08	3,734	4,979
LG&E	RTS	2015/09	10,178	13,570
LG&E	RTS	2015/10	10,178	13,570
LG&E	RTS	2015/11	10,178	13,570
LG&E	RTS	2015/12	10,178	13,570
LG&E	RTS	2016/01	10,178	13,570
LG&E	RTS	2016/02	10,178	13,570
LG&E	RTS	2016/03	10,178	13,570
LG&E	RTS	2016/04	5,117	6,822
LG&E	RTS	2016/05	5,073	6,764
LG&E	RTS	2016/06	5,073	6,764
LG&E	RTS	2016/07	5,073	6,764
LG&E	RTS	2016/08	5,073	6,764
LG&E	TODS	2015/09	385	450
LG&E	TODS	2015/10	371	450
LG&E	TODS	2015/11	338	450
LG&E	TODS	2015/12	338	450
LG&E	TODS	2016/01	338	450
LG&E	TODS	2016/02	338	450
LG&E	TODS	2016/03	338	450
LG&E	TODS	2016/04	338	450
LG&E	TODS	2016/05	343	450
LG&E	TODS	2016/06	402	450
LG&E	TODS	2016/07	406	450
LG&E	TODS	2016/08	405	450
LG&E	TODS	2015/09	593	740
LG&E	TODS	2015/10	603	740
LG&E	TODS	2015/11	568	740
LG&E	TODS	2015/12	568	740
LG&E	TODS	2016/01	555	740
LG&E	TODS	2016/02	555	740
LG&E	TODS	2016/03	588	740
LG&E	TODS	2016/04	599	740
LG&E	TODS	2016/05	555	740
LG&E	TODS	2016/06	555	740
LG&E	TODS	2016/07	580	740
LG&E	TODS	2016/08	566	740
LG&E	TODP	2015/09	490	540
LG&E	TODP	2015/10	490	540
LG&E	TODP	2015/11	506	540

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/12	537	537
LG&E	TODP	2016/01	519	537
LG&E	TODP	2016/02	537	537
LG&E	TODP	2016/03	491	537
LG&E	TODP	2016/04	485	537
LG&E	TODP	2016/05	474	537
LG&E	TODP	2016/06	467	537
LG&E	TODP	2016/07	470	537
LG&E	TODP	2016/08	481	537
LG&E	TODS	2015/09	1,884	2,512
LG&E	TODS	2015/10	1,884	2,512
LG&E	TODS	2015/11	1,884	2,512
LG&E	TODS	2015/12	1,884	2,512
LG&E	TODS	2016/01	1,884	2,512
LG&E	TODS	2016/02	1,884	2,512
LG&E	TODS	2016/03	1,884	2,512
LG&E	TODS	2016/04	1,884	2,512
LG&E	TODS	2016/05	1,884	2,512
LG&E	TODS	2016/06	1,884	2,512
LG&E	TODS	2016/07	2,131	2,512
LG&E	TODS	2016/08	1,746	2,131
LG&E	TODS	2015/09	357	360
LG&E	TODS	2015/10	356	360
LG&E	TODS	2015/11	327	360
LG&E	TODS	2015/12	339	360
LG&E	TODS	2016/01	338	360
LG&E	TODS	2016/02	315	360
LG&E	TODS	2016/03	307	360
LG&E	TODS	2016/04	296	360
LG&E	TODS	2016/05	339	360
LG&E	TODS	2016/06	346	360
LG&E	TODS	2016/07	337	360
LG&E	TODS	2016/08	341	357
LG&E	TODP	2015/09	4,058	5,411
LG&E	TODP	2015/10	4,058	5,411
LG&E	TODP	2015/11	4,058	5,411
LG&E	TODP	2015/12	4,058	5,411
LG&E	TODP	2016/01	4,058	5,411
LG&E	TODP	2016/02	4,058	5,411
LG&E	TODP	2016/03	3,559	4,745
LG&E	TODP	2016/04	2,844	3,053
LG&E	TODP	2016/05	2,958	3,053
LG&E	TODP	2016/06	3,787	3,787

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/07	3,134	3,787
LG&E	TODP	2016/08	3,341	3,787
LG&E	TODS	2015/10	266	355
LG&E	TODS	2015/11	266	355
LG&E	TODS	2015/12	266	355
LG&E	TODS	2016/01	266	355
LG&E	TODS	2016/02	266	355
LG&E	TODS	2016/03	266	355
LG&E	TODS	2016/04	266	355
LG&E	TODS	2016/05	266	355
LG&E	TODS	2016/06	266	355
LG&E	TODS	2016/07	266	355
LG&E	TODS	2016/08	266	355
LG&E	TODS	2015/09	480	550
LG&E	TODS	2015/10	480	550
LG&E	TODS	2015/11	413	550
LG&E	TODS	2015/12	436	550
LG&E	TODS	2016/01	419	550
LG&E	TODS	2016/02	413	550
LG&E	TODS	2016/03	413	550
LG&E	TODS	2016/04	413	550
LG&E	TODS	2016/05	413	550
LG&E	TODS	2016/06	413	550
LG&E	TODS	2016/07	432	550
LG&E	TODS	2016/08	491	550
LG&E	TODS	2015/09	1,182	1,576
LG&E	TODS	2015/10	1,182	1,576
LG&E	TODS	2015/11	1,182	1,576
LG&E	TODS	2015/12	1,182	1,576
LG&E	TODS	2016/01	1,182	1,576
LG&E	TODS	2016/02	1,421	1,576
LG&E	TODS	2016/03	1,305	1,421
LG&E	TODS	2016/04	1,066	1,421
LG&E	TODS	2016/05	1,066	1,421
LG&E	TODS	2016/06	1,066	1,421
LG&E	TODS	2016/07	1,066	1,421
LG&E	TODS	2016/08	1,066	1,421
LG&E	TODP	2015/09	3,759	3,922
LG&E	TODP	2015/10	3,924	3,924
LG&E	TODP	2015/11	3,573	3,924
LG&E	TODP	2015/12	3,420	3,924
LG&E	TODP	2016/01	3,480	3,924
LG&E	TODP	2016/02	3,454	3,924

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/03	3,796	3,924
LG&E	TODP	2016/04	3,693	3,924
LG&E	TODP	2016/05	3,789	3,924
LG&E	TODP	2016/06	3,799	3,924
LG&E	TODP	2016/07	3,841	3,924
LG&E	TODP	2016/08	4,073	4,073
LG&E	TODS	2015/09	286	314
LG&E	TODS	2015/10	298	314
LG&E	TODS	2015/11	281	314
LG&E	TODS	2015/12	278	314
LG&E	TODS	2016/01	301	314
LG&E	TODS	2016/02	290	314
LG&E	TODS	2016/03	281	314
LG&E	TODS	2016/04	272	314
LG&E	TODS	2016/05	276	314
LG&E	TODS	2016/06	334	334
LG&E	TODS	2016/07	352	352
LG&E	TODS	2016/08	335	352
LG&E	TODS	2015/09	260	346
LG&E	TODS	2015/10	260	346
LG&E	TODS	2015/11	260	346
LG&E	TODS	2015/12	260	346
LG&E	TODS	2016/01	260	346
LG&E	TODS	2016/02	260	346
LG&E	TODS	2016/03	260	346
LG&E	TODS	2016/04	260	346
LG&E	TODS	2016/05	260	346
LG&E	TODS	2016/06	260	346
LG&E	TODS	2016/07	260	346
LG&E	TODS	2016/08	260	346
LG&E	TODP	2015/09	1,866	1,974
LG&E	TODP	2015/10	1,592	1,974
LG&E	TODP	2015/11	1,585	1,974
LG&E	TODP	2015/12	1,480	1,974
LG&E	TODP	2016/01	1,480	1,974
LG&E	TODP	2016/02	1,480	1,974
LG&E	TODP	2016/03	1,480	1,974
LG&E	TODP	2016/04	1,506	1,974
LG&E	TODP	2016/05	1,544	1,974
LG&E	TODP	2016/06	1,931	1,974
LG&E	TODP	2016/07	1,955	1,974
LG&E	TODP	2016/08	2,045	2,045
LG&E	TODP	2015/09	1,501	1,657

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/10	1,482	1,657
LG&E	TODP	2015/11	1,484	1,657
LG&E	TODP	2015/12	1,472	1,657
LG&E	TODP	2016/01	1,493	1,657
LG&E	TODP	2016/02	1,243	1,657
LG&E	TODP	2016/03	1,463	1,501
LG&E	TODP	2016/04	1,472	1,501
LG&E	TODP	2016/05	1,493	1,501
LG&E	TODP	2016/06	1,512	1,512
LG&E	TODP	2016/07	1,503	1,512
LG&E	TODP	2016/08	1,514	1,514
LG&E	TODS	2015/09	647	862
LG&E	TODS	2015/10	647	862
LG&E	TODS	2015/11	647	862
LG&E	TODS	2015/12	647	862
LG&E	TODS	2016/01	677	862
LG&E	TODS	2016/02	647	862
LG&E	TODS	2016/03	650	862
LG&E	TODS	2016/04	647	862
LG&E	TODS	2016/05	647	862
LG&E	TODS	2016/06	647	862
LG&E	TODS	2016/07	508	677
LG&E	TODS	2016/08	508	677
LG&E	TODS	2015/09	704	704
LG&E	TODS	2015/10	541	704
LG&E	TODS	2015/11	528	704
LG&E	TODS	2015/12	528	704
LG&E	TODS	2016/01	528	704
LG&E	TODS	2016/02	528	704
LG&E	TODS	2016/03	528	704
LG&E	TODS	2016/04	570	704
LG&E	TODS	2016/05	602	704
LG&E	TODS	2016/06	686	704
LG&E	TODS	2016/07	706	706
LG&E	TODS	2016/08	696	706
LG&E	TODS	2015/09	2,819	2,932
LG&E	TODS	2015/10	2,674	2,932
LG&E	TODS	2015/11	2,585	2,932
LG&E	TODS	2015/12	2,368	2,932
LG&E	TODS	2016/01	2,375	2,932
LG&E	TODS	2016/02	2,246	2,932
LG&E	TODS	2016/03	2,389	2,932
LG&E	TODS	2016/04	2,563	2,932

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	2,764	2,932
LG&E	TODS	2016/06	2,860	2,923
LG&E	TODS	2016/07	2,854	2,923
LG&E	TODS	2016/08	2,879	2,879
LG&E	TODS	2015/09	736	782
LG&E	TODS	2015/10	718	782
LG&E	TODS	2015/11	710	782
LG&E	TODS	2015/12	783	783
LG&E	TODS	2016/01	696	783
LG&E	TODS	2016/02	694	783
LG&E	TODS	2016/03	647	783
LG&E	TODS	2016/04	671	783
LG&E	TODS	2016/05	694	783
LG&E	TODS	2016/06	714	783
LG&E	TODS	2016/07	703	783
LG&E	TODS	2016/08	747	783
LG&E	TODS	2015/09	345	350
LG&E	TODS	2015/10	300	350
LG&E	TODS	2015/11	316	350
LG&E	TODS	2015/12	276	350
LG&E	TODS	2016/01	263	350
LG&E	TODS	2016/02	263	350
LG&E	TODS	2016/03	263	350
LG&E	TODS	2016/04	313	350
LG&E	TODS	2016/05	343	350
LG&E	TODS	2016/06	341	350
LG&E	TODS	2016/07	328	350
LG&E	TODS	2016/08	327	350
LG&E	TODP	2015/09	5,973	6,309
LG&E	TODP	2015/10	6,408	6,408
LG&E	TODP	2015/11	5,968	6,408
LG&E	TODP	2015/12	6,063	6,408
LG&E	TODP	2016/01	6,251	6,408
LG&E	TODP	2016/02	6,029	6,408
LG&E	TODP	2016/03	5,856	6,408
LG&E	TODP	2016/04	6,167	6,408
LG&E	TODP	2016/05	6,278	6,408
LG&E	TODP	2016/06	6,178	6,408
LG&E	TODP	2016/07	6,006	6,408
LG&E	TODP	2016/08	6,026	6,408
LG&E	TODP	2015/09	3,720	4,077
LG&E	TODP	2015/10	3,481	4,077
LG&E	TODP	2015/11	3,117	4,077

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/12	3,057	4,077
LG&E	TODP	2016/01	3,057	4,077
LG&E	TODP	2016/02	3,057	4,077
LG&E	TODP	2016/03	3,057	4,077
LG&E	TODP	2016/04	3,057	4,077
LG&E	TODP	2016/05	3,247	4,077
LG&E	TODP	2016/06	3,907	4,077
LG&E	TODP	2016/07	4,079	4,079
LG&E	TODP	2016/08	3,993	4,079
LG&E	TODS	2015/09	722	868
LG&E	TODS	2015/10	699	868
LG&E	TODS	2015/11	668	868
LG&E	TODS	2015/12	645	853
LG&E	TODS	2016/01	760	791
LG&E	TODS	2016/02	856	856
LG&E	TODS	2016/03	741	856
LG&E	TODS	2016/04	787	856
LG&E	TODS	2016/05	726	856
LG&E	TODS	2016/06	768	856
LG&E	TODS	2016/07	737	856
LG&E	TODS	2016/08	730	856
LG&E	TODS	2015/09	875	1,000
LG&E	TODS	2015/10	832	1,000
LG&E	TODS	2015/11	854	1,000
LG&E	TODS	2015/12	697	886
LG&E	TODP	2016/01	969	969
LG&E	TODP	2016/02	837	969
LG&E	TODP	2016/03	802	969
LG&E	TODP	2016/04	753	969
LG&E	TODP	2016/05	862	969
LG&E	TODP	2016/06	854	969
LG&E	TODP	2016/07	902	969
LG&E	TODP	2016/08	881	969
LG&E	TODS	2015/09	1,036	1,047
LG&E	TODS	2015/10	906	1,047
LG&E	TODS	2015/11	785	1,047
LG&E	TODS	2015/12	785	1,047
LG&E	TODS	2016/01	785	1,047
LG&E	TODS	2016/02	785	1,047
LG&E	TODS	2016/03	785	1,047
LG&E	TODS	2016/04	785	1,047
LG&E	TODS	2016/05	785	1,047
LG&E	TODS	2016/06	943	1,047

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	946	1,036
LG&E	TODS	2016/08	948	1,036
LG&E	TODP	2015/09	2,533	3,030
LG&E	TODP	2015/10	2,301	3,030
LG&E	TODP	2015/11	2,272	3,030
LG&E	TODP	2015/12	2,272	3,030
LG&E	TODP	2016/01	2,272	3,030
LG&E	TODP	2016/02	2,272	3,030
LG&E	TODP	2016/03	2,272	3,030
LG&E	TODP	2016/04	2,272	3,030
LG&E	TODP	2016/05	2,300	3,030
LG&E	TODP	2016/06	3,073	3,073
LG&E	TODP	2016/07	2,976	3,073
LG&E	TODP	2016/08	2,831	3,073
LG&E	TODP	2015/09	2,126	2,295
LG&E	TODP	2015/10	1,989	2,295
LG&E	TODP	2015/11	1,721	2,295
LG&E	TODP	2015/12	1,721	2,295
LG&E	TODP	2016/01	1,797	2,295
LG&E	TODP	2016/02	1,901	2,295
LG&E	TODP	2016/03	1,856	2,295
LG&E	TODP	2016/04	1,918	2,295
LG&E	TODP	2016/05	2,030	2,295
LG&E	TODP	2016/06	2,170	2,295
LG&E	TODP	2016/07	2,126	2,295
LG&E	TODP	2016/08	2,221	2,221
LG&E	TODP	2015/09	1,901	2,024
LG&E	TODP	2015/10	1,875	2,024
LG&E	TODP	2015/11	1,970	2,024
LG&E	TODP	2015/12	2,016	2,024
LG&E	TODP	2016/01	2,018	2,024
LG&E	TODP	2016/02	2,024	2,024
LG&E	TODP	2016/03	2,002	2,024
LG&E	TODP	2016/04	1,965	2,024
LG&E	TODP	2016/05	1,904	2,024
LG&E	TODP	2016/06	1,972	2,024
LG&E	TODP	2016/07	1,989	2,024
LG&E	TODP	2016/08	1,966	2,024
LG&E	TODP	2015/09	10,724	11,500
LG&E	TODP	2015/10	10,883	11,500
LG&E	TODP	2015/11	10,907	11,500
LG&E	TODP	2015/12	11,024	11,500
LG&E	TODP	2016/01	10,665	11,500

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/02	10,722	11,500
LG&E	TODP	2016/03	11,377	11,500
LG&E	TODP	2016/04	11,213	11,377
LG&E	TODP	2016/05	10,522	11,377
LG&E	TODP	2016/06	10,578	11,377
LG&E	TODP	2016/07	10,966	11,377
LG&E	TODP	2016/08	10,921	11,377
LG&E	TODS	2015/09	339	351
LG&E	TODS	2015/10	340	345
LG&E	TODS	2015/11	329	345
LG&E	TODS	2015/12	286	345
LG&E	TODS	2016/01	275	345
LG&E	TODS	2016/02	259	345
LG&E	TODS	2016/03	270	345
LG&E	TODS	2016/04	264	345
LG&E	TODS	2016/05	293	345
LG&E	TODS	2016/06	329	345
LG&E	TODS	2016/07	330	345
LG&E	TODS	2016/08	325	340
LG&E	TODS	2015/09	446	523
LG&E	TODS	2015/10	432	523
LG&E	TODS	2015/11	422	523
LG&E	TODS	2015/12	393	523
LG&E	TODS	2016/01	393	523
LG&E	TODS	2016/02	393	523
LG&E	TODS	2016/03	393	523
LG&E	TODS	2016/04	393	523
LG&E	TODS	2016/05	423	523
LG&E	TODS	2016/06	472	518
LG&E	TODS	2016/07	489	518
LG&E	TODS	2016/08	491	491
LG&E	TODP	2015/09	795	832
LG&E	TODP	2015/10	802	832
LG&E	TODP	2015/11	624	832
LG&E	TODP	2015/12	624	832
LG&E	TODP	2016/01	624	832
LG&E	TODP	2016/02	637	832
LG&E	TODP	2016/03	632	832
LG&E	TODP	2016/04	624	832
LG&E	TODP	2016/05	624	832
LG&E	TODP	2016/06	656	832
LG&E	TODP	2016/07	762	832
LG&E	TODP	2016/08	784	802

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/09	1,417	1,445
LG&E	TODS	2015/10	1,334	1,445
LG&E	TODS	2015/11	1,207	1,445
LG&E	TODS	2015/12	1,084	1,445
LG&E	TODS	2016/01	1,084	1,445
LG&E	TODS	2016/02	1,084	1,445
LG&E	TODS	2016/03	1,084	1,445
LG&E	TODS	2016/04	1,084	1,445
LG&E	TODS	2016/05	1,248	1,445
LG&E	TODS	2016/06	1,332	1,445
LG&E	TODS	2016/07	1,430	1,430
LG&E	TODS	2016/08	1,547	1,547
LG&E	TODS	2015/09	1,361	1,363
LG&E	TODS	2015/10	1,318	1,363
LG&E	TODS	2015/11	1,266	1,363
LG&E	TODS	2015/12	1,242	1,363
LG&E	TODS	2016/01	1,148	1,363
LG&E	TODS	2016/02	1,185	1,363
LG&E	TODS	2016/03	1,183	1,363
LG&E	TODS	2016/04	1,259	1,363
LG&E	TODS	2016/05	1,306	1,363
LG&E	TODS	2016/06	1,304	1,363
LG&E	TODS	2016/07	1,351	1,363
LG&E	TODS	2016/08	1,378	1,378
LG&E	TODS	2015/09	1,033	1,254
LG&E	TODS	2015/10	1,018	1,254
LG&E	TODS	2015/11	1,018	1,254
LG&E	TODS	2015/12	947	1,254
LG&E	TODS	2016/01	1,144	1,254
LG&E	TODS	2016/02	1,146	1,254
LG&E	TODS	2016/03	1,043	1,146
LG&E	TODS	2016/04	1,006	1,146
LG&E	TODS	2016/05	1,027	1,146
LG&E	TODS	2016/06	1,048	1,146
LG&E	TODS	2016/07	1,054	1,146
LG&E	TODS	2016/08	1,029	1,146
LG&E	TODP	2015/09	1,488	1,570
LG&E	TODP	2015/10	1,645	1,645
LG&E	TODP	2015/11	1,588	1,645
LG&E	TODP	2015/12	1,419	1,645
LG&E	TODP	2016/01	1,233	1,645
LG&E	TODP	2016/02	1,233	1,645
LG&E	TODP	2016/03	1,233	1,645

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/04	1,233	1,645
LG&E	TODP	2016/05	1,275	1,645
LG&E	TODP	2016/06	1,233	1,645
LG&E	TODP	2016/07	1,633	1,645
LG&E	TODP	2016/08	1,484	1,645
LG&E	TODS	2015/09	399	399
LG&E	TODS	2015/10	378	399
LG&E	TODS	2015/11	356	399
LG&E	TODS	2015/12	353	399
LG&E	TODS	2016/01	362	399
LG&E	TODS	2016/02	364	399
LG&E	TODS	2016/03	350	399
LG&E	TODS	2016/04	375	399
LG&E	TODS	2016/05	383	399
LG&E	TODS	2016/06	379	399
LG&E	TODS	2016/07	386	399
LG&E	TODS	2016/08	401	401
LG&E	TODS	2015/09	250	276
LG&E	TODS	2015/10	250	276
LG&E	TODS	2015/11	250	276
LG&E	TODS	2015/12	250	276
LG&E	TODS	2016/01	250	276
LG&E	TODS	2016/02	250	276
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2015/09	682	712
LG&E	TODS	2015/10	618	682
LG&E	TODS	2015/11	511	682
LG&E	TODS	2015/12	511	682
LG&E	TODS	2015/12	511	682
LG&E	TODS	2016/02	511	682
LG&E	TODS	2016/03	511	682
LG&E	TODS	2016/04	511	682
LG&E	TODS	2010/04 2016/05	511	682
LG&E LG&E	TODS	2010/05	518	682
LG&E	TODS	2010/00	525	682
LG&E LG&E	TODS	2016/07	701	701
LG&E LG&E	TODS	2016/08	1,308	1,415
LG&E LG&E	TODP	2015/09 2015/10		1,415
LURE	IUUP	2013/10	1,262	1,410

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/11	1,219	1,415
LG&E	TODP	2015/12	1,136	1,415
LG&E	TODP	2016/01	1,111	1,415
LG&E	TODP	2016/02	1,165	1,415
LG&E	TODP	2016/03	1,151	1,415
LG&E	TODP	2016/04	1,132	1,415
LG&E	TODP	2016/05	1,234	1,415
LG&E	TODP	2016/06	1,312	1,415
LG&E	TODP	2016/07	1,350	1,360
LG&E	TODP	2016/08	1,330	1,350
LG&E	RTS	2015/09	4,546	6,061
LG&E	RTS	2015/10	4,282	5,550
LG&E	RTS	2015/11	4,783	5,550
LG&E	RTS	2015/12	5,041	5,550
LG&E	RTS	2016/01	5,393	5,550
LG&E	RTS	2016/02	4,163	5,550
LG&E	RTS	2016/03	5,281	5,550
LG&E	RTS	2016/04	5,336	5,393
LG&E	RTS	2016/05	4,359	5,393
LG&E	RTS	2016/06	5,113	5,393
LG&E	RTS	2016/07	5,384	5,393
LG&E	RTS	2016/08	5,059	5,393
LG&E	TODS	2015/09	379	440
LG&E	TODS	2015/10	371	440
LG&E	TODS	2015/11	344	440
LG&E	TODS	2015/12	330	440
LG&E	TODS	2016/01	330	440
LG&E	TODS	2016/02	330	440
LG&E	TODS	2016/03	330	440
LG&E	TODS	2016/04	330	440
LG&E	TODS	2016/05	330	440
LG&E	TODS	2016/06	350	440
LG&E	TODS	2016/07	378	440
LG&E	TODS	2016/08	379	379
LG&E	TODS	2015/09	1,080	1,147
LG&E	TODS	2015/10	1,030	1,147
LG&E	TODS	2015/11	996	1,147
LG&E	TODS	2015/12	958	1,147
LG&E	TODS	2016/01	1,024	1,147
LG&E	TODS	2016/02	860	1,147
LG&E	TODS	2016/03	947	1,147
LG&E	TODS	2016/04	954	1,147
LG&E	TODS	2016/05	1,066	1,147

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/06	1,078	1,147
LG&E	TODS	2016/07	1,154	1,154
LG&E	TODS	2016/08	1,140	1,154
LG&E	TODS	2015/10	365	380
LG&E	TODS	2015/11	322	380
LG&E	TODS	2015/12	285	380
LG&E	TODS	2016/01	285	380
LG&E	TODS	2016/02	301	380
LG&E	TODS	2016/03	302	380
LG&E	TODS	2016/04	285	380
LG&E	TODS	2016/05	296	380
LG&E	TODS	2016/06	298	380
LG&E	TODS	2016/07	311	380
LG&E	TODS	2016/08	299	380
LG&E	TODS	2015/09	1,920	1,941
LG&E	TODS	2015/10	1,906	1,941
LG&E	TODS	2015/11	1,873	1,941
LG&E	TODS	2015/12	1,888	1,941
LG&E	TODS	2016/01	1,800	1,941
LG&E	TODS	2016/02	1,867	1,941
LG&E	TODS	2016/03	1,809	1,941
LG&E	TODS	2016/04	1,824	1,941
LG&E	TODS	2016/05	1,836	1,941
LG&E	TODS	2016/06	1,868	1,941
LG&E	TODS	2016/07	1,894	1,941
LG&E	TODS	2016/08	1,930	1,930
LG&E	TODP	2015/09	1,873	1,891
LG&E	TODP	2015/10	1,815	1,891
LG&E	TODP	2015/11	1,805	1,891
LG&E	TODP	2015/12	1,847	1,891
LG&E	TODP	2016/01	1,856	1,891
LG&E	TODP	2016/02	1,821	1,891
LG&E	TODP	2016/03	1,848	1,891
LG&E	TODP	2016/04	1,839	1,891
LG&E	TODP	2016/05	1,808	1,891
LG&E	TODP	2016/06	1,848	1,891
LG&E	TODP	2016/07	1,867	1,891
LG&E	TODP	2016/08	1,815	1,873
LG&E	TODS	2015/09	675	675
LG&E	TODS	2015/10	591	675
LG&E	TODS	2015/11	579	675
LG&E	TODS	2015/12	539	675
LG&E	TODS	2016/01	543	675

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	549	675
LG&E	TODS	2016/03	559	675
LG&E	TODS	2016/04	561	675
LG&E	TODS	2016/05	589	675
LG&E	TODS	2016/06	622	675
LG&E	TODS	2016/07	626	675
LG&E	TODS	2016/08	653	675
LG&E	TODS	2015/09	1,642	1,697
LG&E	TODS	2015/10	1,623	1,697
LG&E	TODS	2015/11	1,603	1,697
LG&E	TODS	2015/12	1,603	1,697
LG&E	TODS	2016/01	1,580	1,697
LG&E	TODS	2016/02	1,589	1,697
LG&E	TODS	2016/03	1,612	1,697
LG&E	TODS	2016/04	1,638	1,677
LG&E	TODS	2016/05	1,595	1,677
LG&E	TODS	2016/06	1,597	1,677
LG&E	TODS	2016/07	1,614	1,677
LG&E	TODS	2016/08	1,659	1,659
LG&E	TODS	2015/09	304	367
LG&E	TODS	2015/10	304	367
LG&E	TODS	2015/11	275	367
LG&E	TODS	2015/12	282	367
LG&E	TODS	2016/01	275	367
LG&E	TODS	2016/02	275	367
LG&E	TODS	2016/03	275	367
LG&E	TODS	2016/04	275	367
LG&E	TODS	2016/05	278	367
LG&E	TODS	2016/06	296	367
LG&E	TODS	2016/07	325	367
LG&E	TODS	2016/08	328	330
LG&E	TODS	2015/09	1,746	1,775
LG&E	TODS	2015/10	1,736	1,775
LG&E	TODS	2015/11	1,724	1,770
LG&E	TODS	2015/12	1,733	1,770
LG&E	TODS	2016/01	1,728	1,770
LG&E	TODS	2016/02	1,702	1,768
LG&E	TODS	2016/03	1,721	1,768
LG&E	TODS	2016/04	1,722	1,768
LG&E	TODS	2016/05	1,717	1,768
LG&E	TODS	2016/06	1,745	1,768
LG&E	TODS	2016/07	1,787	1,787
LG&E	TODS	2016/08	1,778	1,787

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/09	1,393	1,491
LG&E	TODP	2015/10	1,315	1,491
LG&E	TODP	2015/11	1,242	1,491
LG&E	TODP	2015/12	1,118	1,491
LG&E	TODP	2016/01	1,199	1,491
LG&E	TODP	2016/02	1,118	1,491
LG&E	TODP	2016/03	1,121	1,491
LG&E	TODP	2016/04	1,118	1,491
LG&E	TODP	2016/05	1,251	1,491
LG&E	TODP	2016/06	1,356	1,491
LG&E	TODP	2016/07	1,398	1,491
LG&E	TODP	2016/08	1,444	1,444
LG&E	TODS	2015/09	565	700
LG&E	TODS	2015/10	581	700
LG&E	TODS	2015/11	616	700
LG&E	TODS	2015/12	560	700
LG&E	TODS	2016/01	598	700
LG&E	TODS	2016/02	565	700
LG&E	TODS	2016/03	597	700
LG&E	TODS	2016/04	595	700
LG&E	TODS	2016/05	674	700
LG&E	TODS	2016/06	648	700
LG&E	TODS	2016/07	624	700
LG&E	TODS	2016/08	634	700
LG&E	TODS	2015/09	418	418
LG&E	TODS	2015/10	426	426
LG&E	TODS	2015/11	432	432
LG&E	TODS	2015/12	400	432
LG&E	TODS	2016/01	419	432
LG&E	TODS	2016/02	450	450
LG&E	TODS	2016/03	440	450
LG&E	TODS	2016/04	453	453
LG&E	TODS	2016/05	435	453
LG&E	TODS	2016/06	494	494
LG&E	TODS	2016/07	472	494
LG&E	TODS	2016/08	522	522
LG&E	TODS	2015/09	635	700
LG&E	TODS	2015/10	570	700
LG&E	TODS	2015/11	568	700
LG&E	TODS	2015/12	560	700
LG&E	TODS	2016/01	665	700
LG&E	TODS	2016/02	660	700
LG&E	TODS	2016/03	571	700

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/04	554	700
LG&E	TODS	2016/05	587	700
LG&E	TODS	2016/06	600	700
LG&E	TODS	2016/07	682	700
LG&E	TODS	2016/08	686	700
LG&E	RTS	2015/09	45,950	51,000
LG&E	RTS	2015/10	43,829	51,000
LG&E	RTS	2015/11	43,546	51,000
LG&E	RTS	2015/12	44,389	51,000
LG&E	RTS	2016/01	45,293	51,000
LG&E	RTS	2016/02	45,742	51,000
LG&E	RTS	2016/03	45,384	51,000
LG&E	RTS	2016/04	45,913	51,000
LG&E	RTS	2016/05	45,904	51,000
LG&E	RTS	2016/06	50,233	51,000
LG&E	RTS	2016/07	47,938	51,000
LG&E	RTS	2016/08	47,507	51,000
LG&E	TODS	2015/09	2,592	3,022
LG&E	TODS	2015/10	2,654	3,022
LG&E	TODS	2015/11	2,267	3,022
LG&E	TODS	2015/12	2,267	3,022
LG&E	TODS	2016/01	2,328	3,022
LG&E	TODS	2016/02	2,773	2,943
LG&E	TODS	2016/03	2,648	2,773
LG&E	TODS	2016/04	2,079	2,773
LG&E	TODS	2016/05	2,300	2,773
LG&E	TODS	2016/06	2,436	2,773
LG&E	TODS	2016/07	2,540	2,773
LG&E	TODS	2016/08	2,716	2,773
LG&E	TODS	2015/09	494	494
LG&E	TODS	2015/10	406	494
LG&E	TODS	2015/11	371	494
LG&E	TODS	2015/12	371	494
LG&E	TODS	2016/01	371	494
LG&E	TODS	2016/02	371	494
LG&E	TODS	2016/03	371	494
LG&E	TODS	2016/04	371	494
LG&E	TODS	2016/05	393	494
LG&E	TODS	2016/06	466	494
LG&E	TODS	2016/07	469	494
LG&E	TODS	2016/08	485	494
LG&E	TODS	2015/09	474	547
LG&E	TODS	2015/10	429	547

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/11	410	547
LG&E	TODS	2015/12	423	547
LG&E	TODS	2016/01	494	547
LG&E	TODS	2016/02	410	547
LG&E	TODS	2016/03	457	547
LG&E	TODS	2016/04	439	547
LG&E	TODS	2016/05	452	547
LG&E	TODS	2016/06	469	547
LG&E	TODS	2016/07	526	547
LG&E	TODS	2016/08	523	526
LG&E	TODS	2015/09	909	1,020
LG&E	TODS	2015/10	818	1,020
LG&E	TODS	2015/11	765	1,020
LG&E	TODS	2015/12	765	1,020
LG&E	TODS	2016/01	765	1,020
LG&E	TODS	2016/02	765	1,020
LG&E	TODS	2016/03	765	1,020
LG&E	TODS	2016/04	765	1,020
LG&E	TODS	2016/05	765	1,020
LG&E	TODS	2016/06	869	1,020
LG&E	TODS	2016/07	897	979
LG&E	TODS	2016/08	957	957
LG&E	TODS	2015/09	424	424
LG&E	TODS	2015/10	326	424
LG&E	TODS	2015/11	318	424
LG&E	TODS	2015/12	318	424
LG&E	TODS	2016/01	318	424
LG&E	TODS	2016/02	318	424
LG&E	TODS	2016/03	318	424
LG&E	TODS	2016/04	318	424
LG&E	TODS	2016/05	320	424
LG&E	TODS	2016/06	464	464
LG&E	TODS	2016/07	440	464
LG&E	TODS	2016/08	512	512
LG&E	TODP	2015/09	884	963
LG&E	TODP	2015/10	866	963
LG&E	TODP	2015/11	722	963
LG&E	TODP	2015/12	722	963
LG&E	TODP	2016/01	722	963
LG&E	TODP	2016/02	722	963
LG&E	TODP	2016/03	722	963
LG&E	TODP	2016/04	722	963
LG&E	TODP	2016/05	722	963

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/06	750	963
LG&E	TODP	2016/07	1,022	1,022
LG&E	TODP	2016/08	905	1,022
LG&E	TODS	2015/09	302	302
LG&E	TODS	2015/10	274	302
LG&E	TODS	2015/11	262	302
LG&E	TODS	2015/12	250	302
LG&E	TODS	2016/01	250	302
LG&E	TODS	2016/02	250	302
LG&E	TODS	2016/03	250	302
LG&E	TODS	2016/04	254	302
LG&E	TODS	2016/05	272	302
LG&E	TODS	2016/06	298	302
LG&E	TODS	2016/07	291	302
LG&E	TODS	2016/08	301	302
LG&E	TODS	2015/09	591	631
LG&E	TODS	2015/10	552	631
LG&E	TODS	2015/11	603	631
LG&E	TODS	2015/12	632	632
LG&E	TODS	2016/01	598	632
LG&E	TODS	2016/02	644	644
LG&E	TODS	2016/03	683	683
LG&E	TODS	2016/04	618	683
LG&E	TODS	2016/05	611	683
LG&E	TODS	2016/06	576	683
LG&E	TODS	2016/07	578	683
LG&E	TODS	2016/08	608	683
LG&E	TODP	2015/09	638	704
LG&E	TODP	2015/10	641	704
LG&E	TODP	2015/11	556	704
LG&E	TODP	2015/12	530	704
LG&E	TODP	2016/01	588	704
LG&E	TODP	2016/02	585	704
LG&E	TODP	2016/03	560	704
LG&E	TODP	2016/04	570	704
LG&E	TODP	2016/05	594	704
LG&E	TODP	2016/06	681	703
LG&E	TODP	2016/07	731	731
LG&E	TODP	2016/08	726	731
LG&E	TODS	2015/09	576	768
LG&E	TODS	2015/10	576	768
LG&E	TODS	2015/11	576	768
LG&E	TODS	2015/12	576	768

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/01	589	768
LG&E	TODS	2016/02	753	768
LG&E	TODS	2016/03	616	753
LG&E	TODS	2016/04	564	753
LG&E	TODS	2016/05	564	753
LG&E	TODS	2016/06	564	753
LG&E	TODS	2016/07	564	753
LG&E	TODS	2016/08	564	753
LG&E	TODP	2015/09	5,852	6,523
LG&E	TODP	2015/10	5,825	6,102
LG&E	TODP	2015/11	5,884	6,102
LG&E	TODP	2015/12	6,283	6,283
LG&E	TODP	2016/01	5,609	6,283
LG&E	TODP	2016/02	5,701	6,283
LG&E	TODP	2016/03	5,911	6,283
LG&E	TODP	2016/04	5,446	6,283
LG&E	TODP	2016/05	5,660	6,283
LG&E	TODP	2016/06	5,904	6,283
LG&E	TODP	2016/07	5,842	6,283
LG&E	TODP	2016/08	6,121	6,283
LG&E	TODS	2015/09	445	490
LG&E	TODS	2015/10	388	490
LG&E	TODS	2015/11	367	490
LG&E	TODS	2015/12	367	490
LG&E	TODS	2016/01	367	490
LG&E	TODS	2016/02	367	490
LG&E	TODS	2016/03	367	490
LG&E	TODS	2016/04	367	490
LG&E	TODS	2016/05	367	490
LG&E	TODS	2016/06	367	490
LG&E	TODS	2016/07	390	490
LG&E	TODS	2016/08	441	445
LG&E	TODS	2015/09	495	496
LG&E	TODS	2015/10	494	496
LG&E	TODS	2015/11	407	496
LG&E	TODS	2015/12	424	496
LG&E	TODS	2016/01	372	496
LG&E	TODS	2016/02	372	496
LG&E	TODS	2016/03	372	496
LG&E	TODS	2016/04	403	496
LG&E	TODS	2016/05	372	496
LG&E	TODS	2016/06	407	496
LG&E	TODS	2016/07	485	496

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/08	442	495
LG&E	TODP	2015/09	614	651
LG&E	TODP	2015/10	552	651
LG&E	TODP	2015/11	499	651
LG&E	TODP	2015/12	488	651
LG&E	TODP	2016/01	488	651
LG&E	TODP	2016/02	488	651
LG&E	TODP	2016/03	488	651
LG&E	TODP	2016/04	511	651
LG&E	TODP	2016/05	541	651
LG&E	TODP	2016/06	629	651
LG&E	TODP	2016/07	644	644
LG&E	TODP	2016/08	634	644
LG&E	TODS	2015/09	635	815
LG&E	TODS	2015/10	611	815
LG&E	TODS	2015/11	611	815
LG&E	TODS	2015/12	611	815
LG&E	TODS	2016/01	611	815
LG&E	TODS	2016/02	611	815
LG&E	TODS	2016/03	611	815
LG&E	TODS	2016/04	611	815
LG&E	TODS	2016/05	611	815
LG&E	TODS	2016/06	647	815
LG&E	TODS	2016/07	642	815
LG&E	TODS	2016/08	649	815
LG&E	TODS	2015/09	517	689
LG&E	TODS	2015/10	517	689
LG&E	TODS	2015/11	517	689
LG&E	TODS	2015/12	517	689
LG&E	TODS	2016/01	544	689
LG&E	TODS	2016/02	605	689
LG&E	TODS	2016/03	571	605
LG&E	TODS	2016/04	454	605
LG&E	TODS	2016/05	454	605
LG&E	TODS	2016/06	454	605
LG&E	TODS	2016/07	454	605
LG&E	TODS	2016/08	469	605
LG&E	TODS	2015/09	367	490
LG&E	TODS	2015/10	367	490
LG&E	TODS	2015/11	367	490
LG&E	TODS	2015/12	367	490
LG&E	TODS	2016/01	367	490
LG&E	TODS	2016/02	445	490

			Deep Demand @	Dees Demand @
Company	High-Level Rate	Billing Period	Base Demand @ 75% Ratchet	Base Demand @ 100% Ratchet
Company	Category Description	billing Periou	(kW)	(kW)
		2016/02		
LG&E LG&E	TODS TODS	2016/03 2016/04	379 334	445 445
LG&E LG&E	TODS	2016/04 2016/05	334	445
LG&E LG&E	TODS	2016/05	334	445
LG&E	TODS	2010/00	334	445
LG&E LG&E	TODS	2016/07	334	445
LG&E LG&E	TODS	2016/08	397	443
LG&E LG&E	TODS	2015/10	390	418
LG&E LG&E	TODS		314	418
		2015/11		
LG&E	TODS	2015/12	313	418
LG&E	TODS	2016/01	313	418
LG&E	TODS	2016/02	313	418
LG&E	TODS	2016/03	313	418
LG&E	TODS	2016/04	324	418
LG&E	TODS	2016/05	334	418
LG&E	TODS	2016/06	387	418
LG&E	TODS	2016/07	408	413
LG&E	TODS	2016/08	407	408
LG&E	TODS	2015/09	387	389
LG&E	TODS	2015/10	365	389
LG&E	TODS	2015/11	423	423
LG&E	TODS	2015/12	369	423
LG&E	TODS	2016/01	373	423
LG&E	TODS	2016/02	353	423
LG&E	TODS	2016/03	389	423
LG&E	TODS	2016/04	355	423
LG&E	TODS	2016/05	350	423
LG&E	TODS	2016/06	363	423
LG&E	TODS	2016/07	359	423
LG&E	TODS	2016/08	389	423
LG&E	TODS	2015/09	595	646
LG&E	TODS	2015/10	488	646
LG&E	TODS	2015/11	485	646
LG&E	TODS	2015/12	485	646
LG&E	TODS	2016/01	546	646
LG&E	TODS	2016/02	531	646
LG&E	TODS	2016/03	485	646
LG&E	TODS	2016/04	485	646
LG&E	TODS	2016/05	525	646
LG&E	TODS	2016/06	584	646
LG&E	TODS	2016/07	626	646
LG&E	TODS	2016/08	618	626
LG&E	TODS	2015/09	278	290

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/10	260	290
LG&E	TODS	2015/11	251	290
LG&E	TODS	2015/12	250	290
LG&E	TODS	2016/01	252	290
LG&E	TODS	2016/02	250	290
LG&E	TODS	2016/03	250	290
LG&E	TODS	2016/04	250	290
LG&E	TODS	2016/05	252	290
LG&E	TODS	2016/06	276	290
LG&E	TODS	2016/07	282	282
LG&E	TODS	2016/08	292	292
LG&E	TODS	2015/09	275	308
LG&E	TODS	2015/10	289	308
LG&E	TODS	2015/11	254	308
LG&E	TODS	2015/12	250	308
LG&E	TODS	2016/01	250	308
LG&E	TODS	2016/02	250	308
LG&E	TODS	2016/03	250	308
LG&E	TODS	2016/04	250	308
LG&E	TODS	2016/05	250	308
LG&E	TODS	2016/06	277	308
LG&E	TODS	2016/07	266	308
LG&E	TODS	2016/08	299	299
LG&E	TODS	2015/09	358	445
LG&E	TODS	2015/10	334	445
LG&E	TODS	2015/11	334	445
LG&E	TODS	2015/12	334	445
LG&E	TODS	2016/01	390	445
LG&E	TODS	2016/02	366	400
LG&E	TODS	2016/03	310	400
LG&E	TODS	2016/04	300	400
LG&E	TODS	2016/05	329	400
LG&E	TODS	2016/06	376	400
LG&E	TODS	2016/07	405	405
LG&E	TODS	2016/08	416	416
LG&E	TODS	2015/09	486	506
LG&E	TODS	2015/10	474	506
LG&E	TODS	2015/11	464	506
LG&E	TODS	2015/12	443	506
LG&E	TODS	2016/01	441	506
LG&E	TODS	2016/02	428	506
LG&E	TODS	2016/03	461	506
LG&E	TODS	2016/04	425	506

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	472	506
LG&E	TODS	2016/06	482	506
LG&E	TODS	2016/07	529	529
LG&E	TODS	2016/08	586	586
LG&E	TODS	2015/09	646	688
LG&E	TODS	2015/10	642	688
LG&E	TODS	2015/11	589	688
LG&E	TODS	2015/12	573	688
LG&E	TODS	2016/01	636	688
LG&E	TODS	2016/02	569	688
LG&E	TODS	2016/03	579	688
LG&E	TODS	2016/04	610	688
LG&E	TODS	2016/05	604	688
LG&E	TODS	2016/06	662	664
LG&E	TODS	2016/07	639	662
LG&E	TODS	2016/08	626	662
LG&E	TODS	2015/09	250	279
LG&E	TODS	2015/10	250	279
LG&E	TODS	2015/11	250	279
LG&E	TODS	2015/12	250	279
LG&E	TODS	2016/01	250	279
LG&E	TODS	2016/02	250	266
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2015/09	503	503
LG&E	TODS	2015/10	445	503
LG&E	TODS	2015/11	476	503
LG&E	TODS	2015/12	384	503
LG&E	TODS	2016/01	395	503
LG&E	TODS	2016/02	425	503
LG&E	TODS	2016/03	430	503
LG&E	TODS	2016/04	446	503
LG&E	TODS	2016/05	438	503
LG&E	TODS	2016/06	468	503
LG&E	TODS	2016/07	499	503
LG&E	TODS	2016/08	463	503
LG&E	TODS	2015/09	311	320
LG&E	TODS	2015/10	299	320
LG&E	TODS	2015/11	270	320

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	258	320
LG&E	TODS	2016/01	344	344
LG&E	TODS	2016/02	293	344
LG&E	TODS	2016/03	258	344
LG&E	TODS	2016/04	258	344
LG&E	TODS	2016/05	313	344
LG&E	TODS	2016/06	299	344
LG&E	TODS	2016/07	258	344
LG&E	TODS	2016/08	344	344
LG&E	TODP	2015/09	15,054	15,483
LG&E	TODP	2015/10	14,585	15,483
LG&E	TODP	2015/11	14,010	15,483
LG&E	TODP	2015/12	12,985	15,483
LG&E	TODP	2016/01	13,459	15,483
LG&E	TODP	2016/02	13,353	15,483
LG&E	TODP	2016/03	13,897	15,483
LG&E	TODP	2016/04	14,433	15,483
LG&E	TODP	2016/05	14,303	15,483
LG&E	TODP	2016/06	14,154	15,483
LG&E	TODP	2016/07	14,883	15,054
LG&E	TODP	2016/08	14,742	15,054
LG&E	TODS	2016/05	290	290
LG&E	TODS	2016/06	288	290
LG&E	TODS	2016/07	272	290
LG&E	TODS	2016/08	306	306
LG&E	TODS	2015/09	441	588
LG&E	TODS	2015/10	441	588
LG&E	TODS	2015/11	441	588
LG&E	TODS	2015/12	441	588
LG&E	TODS	2016/01	485	588
LG&E	TODS	2016/02	543	588
LG&E	TODS	2016/03	407	543
LG&E	TODS	2016/04	407	543
LG&E	TODS	2016/05	407	543
LG&E	TODS	2016/06	450	543
LG&E	TODS	2016/07	469	543
LG&E	TODS	2016/08	491	543
LG&E	TODS	2015/09	362	425
LG&E	TODS	2015/10	319	425
LG&E	TODS	2015/11	319	425
LG&E	TODS	2015/12	319	425
LG&E	TODS	2016/01	319	425
LG&E	TODS	2016/02	319	425

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/03	319	425
LG&E	TODS	2016/04	319	425
LG&E	TODS	2016/05	319	425
LG&E	TODS	2016/06	365	425
LG&E	TODS	2016/07	386	425
LG&E	TODS	2016/08	370	425
LG&E	TODS	2015/09	292	292
LG&E	TODS	2015/10	280	292
LG&E	TODS	2015/11	273	292
LG&E	TODS	2015/12	266	292
LG&E	TODS	2016/01	274	292
LG&E	TODS	2016/02	270	292
LG&E	TODS	2016/03	293	293
LG&E	TODS	2016/04	280	293
LG&E	TODS	2016/05	312	312
LG&E	TODS	2016/06	349	349
LG&E	TODS	2016/07	354	354
LG&E	TODS	2016/08	351	354
LG&E	TODS	2015/09	336	386
LG&E	TODS	2015/10	313	342
LG&E	TODS	2015/11	308	342
LG&E	TODS	2015/12	264	342
LG&E	TODS	2016/01	271	342
LG&E	TODS	2016/02	257	342
LG&E	TODS	2016/03	268	342
LG&E	TODS	2016/04	269	342
LG&E	TODS	2016/05	318	342
LG&E	TODS	2016/06	342	342
LG&E	TODS	2016/07	396	396
LG&E	TODS	2016/08	356	396
LG&E	TODS	2015/09	281	340
LG&E	TODS	2015/10	255	340
LG&E	TODS	2015/11	255	340
LG&E	TODS	2015/12	255	340
LG&E	TODS	2016/01	255	340
LG&E	TODS	2016/02	255	340
LG&E	TODS	2016/03	255	340
LG&E	TODS	2016/04	255	340
LG&E	TODS	2016/05	262	340
LG&E	TODS	2016/06	304	340
LG&E	TODS	2016/07	297	340
LG&E	TODS	2016/08	300	340
LG&E	TODP	2015/09	3,210	3,419

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/10	3,173	3,210
LG&E	TODP	2015/11	2,843	3,210
LG&E	TODP	2015/12	2,722	3,210
LG&E	TODP	2016/01	3,015	3,210
LG&E	TODP	2016/02	3,018	3,210
LG&E	TODP	2016/03	3,164	3,210
LG&E	TODP	2016/04	3,074	3,210
LG&E	TODP	2016/05	3,001	3,210
LG&E	TODP	2016/06	2,874	3,210
LG&E	TODP	2016/07	3,106	3,210
LG&E	TODP	2016/08	3,230	3,230
LG&E	TODS	2015/09	250	322
LG&E	TODS	2015/10	250	322
LG&E	TODS	2015/11	250	322
LG&E	TODS	2015/12	265	306
LG&E	TODS	2016/01	256	279
LG&E	TODS	2016/02	253	270
LG&E	TODS	2016/03	250	270
LG&E	TODS	2016/04	250	265
LG&E	TODS	2016/05	250	265
LG&E	TODS	2016/06	250	265
LG&E	TODS	2016/07	250	265
LG&E	TODS	2016/08	263	265
LG&E	TODP	2015/09	1,057	1,205
LG&E	TODP	2015/10	950	1,205
LG&E	TODP	2015/11	904	1,205
LG&E	TODP	2015/12	904	1,205
LG&E	TODP	2016/01	904	1,205
LG&E	TODP	2016/02	904	1,205
LG&E	TODP	2016/03	904	1,205
LG&E	TODP	2016/04	904	1,205
LG&E	TODP	2016/05	907	1,205
LG&E	TODP	2016/06	1,157	1,205
LG&E	TODP	2016/07	1,302	1,302
LG&E	TODP	2016/08	1,237	1,302
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	282	282
LG&E	TODS	2016/08	277	282
LG&E	TODS	2015/09	666	888
LG&E	TODS	2015/10	666	888
LG&E	TODS	2015/11	666	888
LG&E	TODS	2015/12	666	888
LG&E	TODS	2016/01	666	888

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	666	888
LG&E	TODS	2016/03	666	888
LG&E	TODS	2016/04	666	888
LG&E	TODS	2016/05	721	888
LG&E	TODS	2016/06	815	815
LG&E	TODS	2016/07	856	856
LG&E	TODS	2016/08	914	914
LG&E	TODS	2015/09	1,040	1,386
LG&E	TODS	2015/10	1,040	1,386
LG&E	TODS	2015/11	1,040	1,386
LG&E	TODS	2015/12	1,040	1,386
LG&E	TODS	2016/01	1,454	1,454
LG&E	TODS	2016/02	1,091	1,454
LG&E	TODS	2016/03	1,091	1,454
LG&E	TODS	2016/04	1,091	1,454
LG&E	TODS	2016/05	1,091	1,454
LG&E	TODS	2016/06	1,091	1,454
LG&E	TODS	2016/07	1,091	1,454
LG&E	TODS	2016/08	1,091	1,454
LG&E	TODS	2015/09	560	577
LG&E	TODS	2015/10	499	577
LG&E	TODS	2015/11	454	577
LG&E	TODS	2015/12	460	577
LG&E	TODS	2016/01	492	577
LG&E	TODS	2016/02	523	577
LG&E	TODS	2016/03	448	577
LG&E	TODS	2016/04	438	577
LG&E	TODS	2016/05	472	577
LG&E	TODS	2016/06	554	577
LG&E	TODS	2016/07	550	577
LG&E	TODS	2016/08	559	560
LG&E	TODS	2015/09	276	300
LG&E	TODS	2015/10	261	300
LG&E	TODS	2015/11	257	300
LG&E	TODS	2015/12	250	300
LG&E	TODS	2016/01	250	300
LG&E	TODS	2016/02	250	300
LG&E	TODS	2016/03	252	300
LG&E	TODS	2016/04	250	300
LG&E	TODS	2016/05	250	300
LG&E	TODS	2016/06	278	300
LG&E	TODS	2016/08	281	300
LG&E	TODP	2015/09	2,696	2,782

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2015/10	2,776	2,782
LG&E	TODP	2015/11	2,638	2,782
LG&E	TODP	2015/12	2,575	2,782
LG&E	TODP	2016/01	2,598	2,782
LG&E	TODP	2016/02	2,529	2,782
LG&E	TODP	2016/03	2,615	2,782
LG&E	TODP	2016/04	2,632	2,782
LG&E	TODP	2016/05	2,667	2,782
LG&E	TODP	2016/06	2,645	2,782
LG&E	TODP	2016/07	2,645	2,776
LG&E	TODP	2016/08	3,054	3,054
LG&E	TODS	2015/11	286	286
LG&E	TODS	2015/12	274	365
LG&E	TODS	2016/01	274	365
LG&E	TODS	2016/02	274	365
LG&E	TODS	2016/03	338	365
LG&E	TODS	2016/04	337	365
LG&E	TODS	2016/05	339	365
LG&E	TODS	2016/06	378	378
LG&E	TODS	2016/07	383	383
LG&E	TODS	2016/08	412	412
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	300	400
LG&E	TODS	2016/07	300	400
LG&E	TODS	2016/08	300	400
LG&E	TODS	2015/09	341	365
LG&E	TODS	2015/10	337	365
LG&E	TODS	2015/11	286	365
LG&E	TODS	2015/12	274	365
LG&E	TODS	2016/01	274	365
LG&E	TODS	2016/02	274	365
LG&E	TODS	2016/03	274	365
LG&E	TODS	2016/04	274	365
LG&E	TODS	2016/05	281	365
LG&E	TODS	2016/06	305	365
LG&E	TODS	2016/07	350	365
LG&E	TODS	2016/08	356	356
LG&E	TODP	2015/09	486	589
LG&E	TODP	2015/10	1,185	1,185
LG&E	TODP	2015/11	888	1,185
LG&E	TODP	2015/12	888	1,185
LG&E	TODP	2016/01	888	1,185
LG&E	TODP	2016/02	888	1,185

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/03	888	1,185
LG&E	TODP	2016/04	888	1,185
LG&E	TODP	2016/05	888	1,185
LG&E	TODP	2016/06	888	1,185
LG&E	TODP	2016/07	888	1,185
LG&E	TODP	2016/08	1,181	1,185
LG&E	TODP	2015/09	831	1,108
LG&E	TODP	2015/10	831	1,108
LG&E	TODP	2015/11	831	1,108
LG&E	TODP	2015/12	831	1,108
LG&E	TODP	2016/01	831	1,108
LG&E	TODP	2016/02	831	1,108
LG&E	TODP	2016/03	831	1,108
LG&E	TODP	2016/04	831	1,108
LG&E	TODP	2016/05	424	519
LG&E	TODP	2016/06	1,197	1,197
LG&E	TODP	2016/07	898	1,197
LG&E	TODP	2016/08	898	1,197
LG&E	TODS	2015/09	1,176	1,176
LG&E	TODS	2015/10	1,198	1,198
LG&E	TODS	2015/11	1,207	1,207
LG&E	TODS	2015/12	1,202	1,207
LG&E	TODS	2016/01	1,210	1,210
LG&E	TODS	2016/02	1,238	1,238
LG&E	TODS	2016/03	1,267	1,267
LG&E	TODS	2016/04	1,334	1,334
LG&E	TODS	2016/05	1,286	1,334
LG&E	TODS	2016/06	1,325	1,334
LG&E	TODS	2016/07	1,411	1,411
LG&E	TODS	2016/08	1,438	1,438
LG&E	TODS	2015/09	296	309
LG&E	TODS	2015/10	286	309
LG&E	TODS	2015/11	307	309
LG&E	TODS	2015/12	298	309
LG&E	TODS	2016/01	312	312
LG&E	TODS	2016/02	279	312
LG&E	TODS	2016/03	250	312
LG&E	TODS	2016/04	250	312
LG&E	TODS	2016/05	339	339
LG&E	TODS	2016/06	263	339
LG&E	TODS	2016/07	273	339
LG&E	TODS	2016/08	355	355
LG&E	TODS	2015/09	455	516

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/10	488	516
LG&E	TODS	2015/11	426	516
LG&E	TODS	2015/12	387	516
LG&E	TODS	2016/01	387	516
LG&E	TODS	2016/02	387	516
LG&E	TODS	2016/03	387	516
LG&E	TODS	2016/04	387	516
LG&E	TODS	2016/05	387	516
LG&E	TODS	2016/06	448	516
LG&E	TODS	2016/07	490	512
LG&E	TODS	2016/08	551	551
LG&E	TODS	2015/09	452	571
LG&E	TODS	2015/10	467	571
LG&E	TODS	2015/11	433	571
LG&E	TODS	2015/12	462	571
LG&E	TODS	2016/01	480	571
LG&E	TODS	2016/02	500	544
LG&E	TODS	2016/03	506	506
LG&E	TODS	2016/04	493	506
LG&E	TODS	2016/05	445	506
LG&E	TODS	2016/06	434	506
LG&E	TODS	2016/07	426	506
LG&E	TODS	2016/08	427	506
LG&E	TODS	2015/09	273	350
LG&E	TODS	2015/10	265	350
LG&E	TODS	2015/11	268	350
LG&E	TODS	2015/12	309	350
LG&E	TODS	2016/01	309	350
LG&E	TODS	2016/02	320	350
LG&E	TODS	2016/03	315	320
LG&E	TODS	2016/04	293	320
LG&E	TODS	2016/05	289	320
LG&E	TODS	2016/06	259	320
LG&E	TODS	2016/07	264	320
LG&E	TODS	2016/08	253	320
LG&E	TODS	2015/09	1,507	1,589
LG&E	TODS	2015/10	1,475	1,589
LG&E	TODS	2015/11	1,191	1,589
LG&E	TODS	2015/12	1,197	1,589
LG&E	TODS	2016/01	1,191	1,589
LG&E	TODS	2016/02	1,191	1,589
LG&E	TODS	2016/03	1,191	1,589
LG&E	TODS	2016/04	1,201	1,589

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	1,219	1,589
LG&E	TODS	2016/06	1,272	1,589
LG&E	TODS	2016/07	1,873	1,873
LG&E	TODS	2016/08	1,645	1,873
LG&E	TODS	2015/09	616	702
LG&E	TODS	2015/10	744	744
LG&E	TODS	2015/11	722	744
LG&E	TODS	2015/12	571	744
LG&E	TODS	2016/01	694	744
LG&E	TODS	2016/02	653	744
LG&E	TODS	2016/03	602	744
LG&E	TODS	2016/04	589	744
LG&E	TODS	2016/05	726	744
LG&E	TODS	2016/06	776	776
LG&E	TODS	2016/07	786	786
LG&E	TODS	2016/08	781	786
LG&E	TODS	2015/09	571	761
LG&E	TODS	2015/10	581	761
LG&E	TODS	2015/11	618	761
LG&E	TODS	2015/12	751	761
LG&E	TODS	2016/01	760	761
LG&E	TODS	2016/02	758	760
LG&E	TODS	2016/03	730	760
LG&E	TODS	2016/04	660	760
LG&E	TODS	2016/05	570	760
LG&E	TODS	2016/06	570	760
LG&E	TODS	2016/07	570	760
LG&E	TODS	2016/08	570	760
LG&E	TODS	2015/09	250	307
LG&E	TODS	2015/10	250	307
LG&E	TODS	2015/11	250	307
LG&E	TODS	2015/12	266	307
LG&E	TODS	2016/01	311	311
LG&E	TODS	2016/02	300	311
LG&E	TODS	2016/03	250	311
LG&E	TODS	2016/04	250	311
LG&E	TODS	2016/05	250	311
LG&E	TODS	2016/06	250	311
LG&E	TODS	2016/07	261	311
LG&E	TODS	2016/08	250	311
LG&E	TODS	2015/09	661	661
LG&E	TODS	2015/10	621	661
LG&E	TODS	2015/11	651	661

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	630	661
LG&E	TODS	2016/01	688	688
LG&E	TODS	2016/02	653	688
LG&E	TODS	2016/03	682	688
LG&E	TODS	2016/04	698	698
LG&E	TODS	2016/05	666	698
LG&E	TODS	2016/06	645	698
LG&E	TODS	2016/07	637	698
LG&E	TODS	2016/08	638	698
LG&E	TODP	2015/09	1,400	1,532
LG&E	TODP	2015/10	1,247	1,532
LG&E	TODP	2015/11	1,203	1,532
LG&E	TODP	2015/12	1,149	1,532
LG&E	TODP	2016/01	1,149	1,532
LG&E	TODP	2016/02	1,149	1,532
LG&E	TODP	2016/03	1,149	1,532
LG&E	TODP	2016/04	1,290	1,532
LG&E	TODP	2016/05	1,298	1,532
LG&E	TODP	2016/06	1,516	1,532
LG&E	TODP	2016/07	1,472	1,532
LG&E	TODP	2016/08	1,532	1,532
LG&E	TODP	2015/09	3,383	3,383
LG&E	TODP	2015/10	3,214	3,383
LG&E	TODP	2015/11	2,858	3,383
LG&E	TODP	2015/12	2,952	3,383
LG&E	TODP	2016/01	2,760	3,383
LG&E	TODP	2016/02	2,876	3,383
LG&E	TODP	2016/03	2,922	3,383
LG&E	TODP	2016/04	2,956	3,383
LG&E	TODP	2016/05	3,153	3,383
LG&E	TODP	2016/06	3,395	3,395
LG&E	TODP	2016/07	3,558	3,558
LG&E	TODP	2016/08	3,510	3,558
LG&E	TODP	2015/09	1,132	1,509
LG&E	TODP	2015/10	1,132	1,509
LG&E	TODP	2015/11	1,132	1,509
LG&E	TODP	2015/12	1,158	1,233
LG&E	TODP	2016/01	1,206	1,206
LG&E	TODP	2016/02	1,258	1,258
LG&E	TODP	2016/03	1,279	1,279
LG&E	TODP	2016/04	1,251	1,279
LG&E	TODP	2016/05	1,341	1,341
LG&E	TODP	2016/06	1,195	1,341

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/07	1,006	1,341
LG&E	TODP	2016/08	1,006	1,341
LG&E	TODS	2015/09	403	419
LG&E	TODS	2015/10	374	419
LG&E	TODS	2015/11	410	419
LG&E	TODS	2015/12	358	419
LG&E	TODS	2016/01	349	419
LG&E	TODS	2016/02	365	419
LG&E	TODS	2016/03	317	419
LG&E	TODS	2016/04	326	419
LG&E	TODS	2016/05	314	419
LG&E	TODS	2016/06	342	419
LG&E	TODS	2016/07	342	419
LG&E	TODS	2016/08	307	410
LG&E	TODS	2015/09	411	411
LG&E	TODS	2015/10	380	411
LG&E	TODS	2015/11	340	411
LG&E	TODS	2015/12	309	411
LG&E	TODS	2016/01	336	411
LG&E	TODS	2016/02	344	411
LG&E	TODS	2016/03	368	411
LG&E	TODS	2016/04	406	411
LG&E	TODS	2016/05	400	411
LG&E	TODS	2016/06	421	421
LG&E	TODS	2016/07	333	421
LG&E	TODS	2016/08	333	421
LG&E	TODP	2015/09	498	600
LG&E	TODP	2015/10	526	600
LG&E	TODP	2015/11	503	600
LG&E	TODP	2015/12	489	600
LG&E	TODP	2016/01	590	600
LG&E	TODP	2016/02	603	603
LG&E	TODP	2016/03	528	603
LG&E	TODP	2016/04	521	603
LG&E	TODP	2016/05	534	603
LG&E	TODP	2016/06	515	603
LG&E	TODP	2016/07	504	603
LG&E	TODP	2016/08	533	603
LG&E	TODS	2015/09	404	414
LG&E	TODS	2015/10	398	414
LG&E	TODS	2015/11	401	414
LG&E	TODS	2015/12	362	414
LG&E	TODS	2016/01	310	414

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	365	414
LG&E	TODS	2016/03	321	414
LG&E	TODS	2016/04	359	414
LG&E	TODS	2016/05	370	414
LG&E	TODS	2016/06	377	414
LG&E	TODS	2016/07	426	426
LG&E	TODS	2016/08	451	451
LG&E	TODS	2015/09	333	365
LG&E	TODS	2015/10	338	365
LG&E	TODS	2015/11	286	365
LG&E	TODS	2015/12	274	365
LG&E	TODS	2016/01	274	365
LG&E	TODS	2016/02	274	365
LG&E	TODS	2016/03	274	365
LG&E	TODS	2016/04	274	365
LG&E	TODS	2016/05	302	365
LG&E	TODS	2016/06	292	365
LG&E	TODS	2016/07	345	365
LG&E	TODS	2016/08	391	391
LG&E	TODS	2015/09	601	689
LG&E	TODS	2015/10	517	689
LG&E	TODS	2015/11	524	689
LG&E	TODS	2015/12	517	689
LG&E	TODS	2016/01	517	689
LG&E	TODS	2016/02	517	689
LG&E	TODS	2016/03	563	689
LG&E	TODS	2016/04	572	689
LG&E	TODS	2016/05	617	689
LG&E	TODS	2016/06	701	701
LG&E	TODS	2016/07	730	730
LG&E	TODS	2016/08	725	730
LG&E	TODS	2015/09	852	989
LG&E	TODS	2015/10	742	989
LG&E	TODS	2015/11	811	989
LG&E	TODS	2015/12	778	989
LG&E	TODS	2016/01	950	989
LG&E	TODS	2016/02	893	958
LG&E	TODS	2016/03	780	958
LG&E	TODS	2016/04	718	958
LG&E	TODS	2016/05	818	958
LG&E	TODS	2016/06	895	958
LG&E	TODS	2016/07	943	950
LG&E	TODS	2016/08	941	950

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/09	376	501
LG&E	TODS	2015/10	376	501
LG&E	TODS	2015/11	376	501
LG&E	TODS	2015/12	376	501
LG&E	TODS	2016/01	425	501
LG&E	TODS	2016/02	443	500
LG&E	TODS	2016/03	401	443
LG&E	TODS	2016/04	364	443
LG&E	TODS	2016/05	332	443
LG&E	TODS	2016/06	332	443
LG&E	TODS	2016/07	334	443
LG&E	TODS	2016/08	332	443
LG&E	TODS	2015/09	250	275
LG&E	TODS	2015/10	250	275
LG&E	TODS	2015/11	250	275
LG&E	TODS	2015/12	250	275
LG&E	TODS	2016/01	254	275
LG&E	TODS	2015/09	855	957
LG&E	TODS	2015/10	809	957
LG&E	TODS	2015/11	845	957
LG&E	TODS	2015/12	829	957
LG&E	TODS	2016/01	794	957
LG&E	TODS	2016/02	809	957
LG&E	TODS	2016/03	809	957
LG&E	TODS	2016/04	794	957
LG&E	TODS	2016/05	850	957
LG&E	TODS	2016/06	876	957
LG&E	TODS	2016/07	983	983
LG&E	TODS	2016/08	850	983
LG&E	TODS	2015/09	282	376
LG&E	TODS	2015/10	282	376
LG&E	TODS	2015/11	282	376
LG&E	TODS	2015/12	282	376
LG&E	TODS	2016/01	316	376
LG&E	TODS	2016/02	292	317
LG&E	TODS	2016/03	250	316
LG&E	TODS	2016/04	250	316
LG&E	TODS	2016/05	250	316
LG&E	TODS	2016/06	250	316
LG&E	TODS	2016/07	250	316
LG&E	TODS	2016/08	250	316
LG&E	TODS	2015/09	368	490
LG&E	TODS	2015/10	368	490

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/11	368	490
LG&E	TODS	2015/12	368	490
LG&E	TODS	2016/01	368	490
LG&E	TODS	2016/02	368	490
LG&E	TODS	2016/03	368	490
LG&E	TODS	2016/04	368	490
LG&E	TODS	2016/05	368	490
LG&E	TODS	2016/06	368	490
LG&E	TODS	2016/07	368	490
LG&E	TODS	2016/08	368	490
LG&E	TODS	2015/09	800	800
LG&E	TODS	2015/10	786	800
LG&E	TODS	2015/11	786	800
LG&E	TODS	2015/12	736	800
LG&E	TODS	2016/01	752	800
LG&E	TODS	2016/02	765	800
LG&E	TODS	2016/03	787	800
LG&E	TODS	2016/04	782	800
LG&E	TODS	2016/05	758	800
LG&E	TODS	2016/06	774	800
LG&E	TODS	2016/07	765	800
LG&E	TODS	2016/08	739	800
LG&E	TODS	2015/09	362	483
LG&E	TODS	2015/10	362	483
LG&E	TODS	2015/11	362	483
LG&E	TODS	2015/12	362	483
LG&E	TODS	2016/01	392	483
LG&E	TODS	2016/02	419	483
LG&E	TODS	2016/03	376	419
LG&E	TODS	2016/04	314	419
LG&E	TODS	2016/05	314	419
LG&E	TODS	2016/06	314	419
LG&E	TODS	2016/07	314	419
LG&E	TODS	2016/08	314	419
LG&E	TODS	2015/09	259	346
LG&E	TODS	2015/10	259	346
LG&E	TODS	2015/11	259	346
LG&E	TODS	2015/12	254	338
LG&E	TODS	2016/01	270	338
LG&E	TODS	2016/02	275	338
LG&E	TODS	2016/03	252	281
LG&E	TODS	2016/04	250	281
LG&E	TODS	2016/05	250	281

	High-Level Rate		Base Demand @	Base Demand @
Company	Category Description	Billing Period	75% Ratchet (kW)	100% Ratchet (kW)
LG&E	TODS	2016/06	250	281
LG&E	TODS	2016/07	250	275
LG&E	TODS	2016/08	250	275
LG&E	TODS	2015/09	322	329
LG&E	TODS	2015/10	288	329
LG&E	TODS	2015/11	320	329
LG&E	TODS	2015/12	329	329
LG&E	TODS	2016/01	351	351
LG&E	TODS	2016/02	316	351
LG&E	TODS	2016/03	319	351
LG&E	TODS	2016/04	321	351
LG&E	TODS	2016/05	323	351
LG&E	TODS	2016/06	325	351
LG&E	TODS	2016/07	342	351
LG&E	TODS	2016/08	348	351
LG&E	TODS	2015/09	692	748
LG&E	TODS	2015/10	708	748
LG&E	TODS	2015/11	688	748
LG&E	TODS	2015/12	678	748
LG&E	TODS	2016/01	622	748
LG&E	TODS	2016/02	664	748
LG&E	TODS	2016/03	695	748
LG&E	TODS	2016/04	616	748
LG&E	TODS	2016/05	712	748
LG&E	TODS	2016/06	731	748
LG&E	TODS	2016/07	748	748
LG&E	TODS	2016/08	713	748
LG&E	TODS	2015/09	308	410
LG&E	TODS	2015/10	308	410
LG&E	TODS	2015/11	308	410
LG&E	TODS	2015/12	308	410
LG&E	TODS	2016/01	308	410
LG&E	TODS	2016/02	367	394
LG&E	TODS	2016/03	312	367
LG&E	TODS	2016/04	300	367
LG&E	TODS	2016/05	275	367
LG&E	TODS	2016/06	278	367
LG&E	TODS	2016/07	276	367
LG&E	TODS	2016/08	298	367
LG&E	TODP	2015/09	1,090	1,095
LG&E	TODP	2015/10	1,015	1,090
LG&E	TODP	2015/11	1,004	1,090
LG&E	TODP	2015/12	919	1,090

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/01	817	1,090
LG&E	TODP	2016/02	817	1,090
LG&E	TODP	2016/03	1,140	1,140
LG&E	TODP	2016/04	980	1,140
LG&E	TODP	2016/05	1,236	1,236
LG&E	TODP	2016/06	1,127	1,236
LG&E	TODP	2016/07	1,356	1,356
LG&E	TODP	2016/08	1,337	1,356
LG&E	TODP	2015/09	658	663
LG&E	TODP	2015/10	562	663
LG&E	TODP	2015/11	574	663
LG&E	TODP	2015/12	606	663
LG&E	TODP	2016/01	600	663
LG&E	TODP	2016/02	639	663
LG&E	TODP	2016/03	591	658
LG&E	TODP	2016/04	557	658
LG&E	TODP	2016/05	555	658
LG&E	TODP	2016/06	494	658
LG&E	TODP	2016/07	588	658
LG&E	TODP	2016/08	494	658
LG&E	TODP	2015/09	929	929
LG&E	TODP	2015/10	815	929
LG&E	TODP	2015/11	993	993
LG&E	TODP	2015/12	979	993
LG&E	TODP	2016/01	825	993
LG&E	TODP	2016/02	865	993
LG&E	TODP	2016/03	812	993
LG&E	TODP	2016/04	761	993
LG&E	TODP	2016/05	761	993
LG&E	TODP	2016/06	761	993
LG&E	TODP	2016/07	745	993
LG&E	TODP	2016/08	747	993
LG&E	TODP	2015/09	1,706	1,939
LG&E	TODP	2015/10	1,826	1,939
LG&E	TODP	2015/11	1,705	1,939
LG&E	TODP	2015/12	1,553	1,939
LG&E	TODP	2016/01	1,614	1,939
LG&E	TODP	2016/02	1,724	1,939
LG&E	TODP	2016/03	1,705	1,939
LG&E	TODP	2016/04	1,602	1,939
LG&E	TODP	2016/05	1,610	1,939
LG&E	TODP	2016/06	1,698	1,939
LG&E	TODP	2016/07	1,826	1,939

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/08	1,881	1,881
LG&E	TODP	2015/09	907	925
LG&E	TODP	2015/10	856	925
LG&E	TODP	2015/11	866	925
LG&E	TODP	2015/12	810	925
LG&E	TODP	2016/01	800	925
LG&E	TODP	2016/02	784	925
LG&E	TODP	2016/03	742	925
LG&E	TODP	2016/04	791	925
LG&E	TODP	2016/05	806	925
LG&E	TODP	2016/06	802	925
LG&E	TODP	2016/07	853	925
LG&E	TODP	2016/08	805	907
LG&E	TODS	2015/09	671	671
LG&E	TODS	2015/10	610	671
LG&E	TODS	2015/11	523	671
LG&E	TODS	2015/12	503	671
LG&E	TODS	2016/01	533	671
LG&E	TODS	2016/02	546	671
LG&E	TODS	2016/03	559	671
LG&E	TODS	2016/04	601	671
LG&E	TODS	2016/05	582	671
LG&E	TODS	2016/06	622	671
LG&E	TODS	2016/07	665	671
LG&E	TODS	2016/08	666	671
LG&E	TODP	2015/09	2,657	3,011
LG&E	TODP	2015/10	2,651	3,011
LG&E	TODP	2015/11	2,282	3,011
LG&E	TODP	2015/12	2,427	3,011
LG&E	TODP	2016/01	2,258	3,011
LG&E	TODP	2016/02	2,258	3,011
LG&E	TODP	2016/03	2,258	3,011
LG&E	TODP	2016/04	2,465	3,011
LG&E	TODP	2016/05	2,525	3,011
LG&E	TODP	2016/06	2,474	2,780
LG&E	TODP	2016/07	2,468	2,780
LG&E	TODP	2016/08	2,351	2,657
LG&E	TODS	2015/09	397	450
LG&E	TODS	2015/10	351	450
LG&E	TODS	2015/11	338	450
LG&E	TODS	2015/12	338	450
LG&E	TODS	2016/01	338	450
LG&E	TODS	2016/02	338	450

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/03	338	450
LG&E	TODS	2016/04	351	450
LG&E	TODS	2016/05	376	450
LG&E	TODS	2016/06	380	450
LG&E	TODS	2016/07	433	450
LG&E	TODS	2016/08	410	450
LG&E	TODP	2015/09	843	1,098
LG&E	TODP	2015/10	914	1,098
LG&E	TODP	2015/11	848	1,006
LG&E	TODP	2015/12	874	960
LG&E	TODP	2016/01	889	960
LG&E	TODP	2016/02	894	952
LG&E	TODP	2016/03	893	920
LG&E	TODP	2016/04	830	920
LG&E	TODP	2016/05	916	920
LG&E	TODP	2016/06	877	920
LG&E	TODP	2016/07	910	920
LG&E	TODP	2016/08	810	916
LG&E	TODS	2015/09	483	532
LG&E	TODS	2015/10	490	532
LG&E	TODS	2015/11	440	532
LG&E	TODS	2015/12	424	532
LG&E	TODS	2016/01	399	532
LG&E	TODS	2016/02	421	532
LG&E	TODS	2016/03	399	532
LG&E	TODS	2016/04	399	532
LG&E	TODS	2016/05	444	532
LG&E	TODS	2016/06	448	532
LG&E	TODS	2016/07	509	509
LG&E	TODS	2016/08	550	550
LG&E	TODS	2015/09	432	443
LG&E	TODS	2015/10	424	439
LG&E	TODS	2015/11	359	439
LG&E	TODS	2015/12	351	439
LG&E	TODS	2016/01	352	439
LG&E	TODS	2016/02	349	439
LG&E	TODS	2016/03	351	439
LG&E	TODS	2016/04	345	439
LG&E	TODS	2016/05	391	439
LG&E	TODS	2016/06	382	439
LG&E	TODS	2016/07	433	439
LG&E	TODS	2016/08	426	433
LG&E	TODS	2015/09	680	875

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/10	656	875
LG&E	TODS	2015/11	667	875
LG&E	TODS	2015/12	766	875
LG&E	TODS	2016/01	747	875
LG&E	TODS	2016/02	656	875
LG&E	TODS	2016/03	800	813
LG&E	TODS	2016/04	758	813
LG&E	TODS	2016/05	760	800
LG&E	TODS	2016/06	738	800
LG&E	TODS	2016/07	669	800
LG&E	TODS	2016/08	651	800
LG&E	TODS	2015/09	357	476
LG&E	TODS	2015/10	417	476
LG&E	TODS	2015/11	424	476
LG&E	TODS	2015/12	400	476
LG&E	TODS	2016/01	434	476
LG&E	TODS	2016/02	557	557
LG&E	TODS	2016/03	418	557
LG&E	TODS	2016/04	503	557
LG&E	TODS	2016/05	469	557
LG&E	TODS	2016/06	443	557
LG&E	TODS	2016/07	418	557
LG&E	TODS	2016/08	418	557
LG&E	TODS	2015/09	572	636
LG&E	TODS	2015/10	514	636
LG&E	TODS	2015/11	494	636
LG&E	TODS	2015/12	477	636
LG&E	TODS	2016/01	477	636
LG&E	TODS	2016/02	477	636
LG&E	TODS	2016/03	477	636
LG&E	TODS	2016/04	494	636
LG&E	TODS	2016/05	551	636
LG&E	TODS	2016/06	574	574
LG&E	TODS	2016/07	554	574
LG&E	TODS	2016/08	518	574
LG&E	TODP	2015/09	483	618
LG&E	TODP	2015/10	474	618
LG&E	TODP	2015/11	481	618
LG&E	TODP	2015/12	440	580
LG&E	TODP	2016/01	512	580
LG&E	TODP	2016/02	518	580
LG&E	TODP	2016/03	492	580
LG&E	TODP	2016/04	445	538

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/05	467	538
LG&E	TODP	2016/06	416	538
LG&E	TODP	2016/07	403	538
LG&E	TODP	2016/08	433	518
LG&E	TODS	2015/09	257	286
LG&E	TODS	2015/10	250	286
LG&E	TODS	2015/11	250	286
LG&E	TODS	2015/12	250	286
LG&E	TODS	2016/01	250	286
LG&E	TODS	2016/02	250	286
LG&E	TODS	2016/03	250	286
LG&E	TODS	2016/04	250	286
LG&E	TODS	2016/05	250	286
LG&E	TODS	2016/06	250	286
LG&E	TODS	2016/07	257	286
LG&E	TODS	2016/08	259	259
LG&E	TODS	2015/09	398	530
LG&E	TODS	2015/10	398	530
LG&E	TODS	2015/11	398	530
LG&E	TODS	2015/12	398	530
LG&E	TODS	2016/01	418	530
LG&E	TODS	2016/02	451	530
LG&E	TODS	2016/03	426	530
LG&E	TODS	2016/04	398	530
LG&E	TODS	2016/05	398	530
LG&E	TODS	2016/06	398	530
LG&E	TODS	2016/07	398	530
LG&E	TODS	2016/08	398	530
LG&E	TODS	2015/09	429	475
LG&E	TODS	2015/10	373	475
LG&E	TODS	2015/11	356	475
LG&E	TODS	2015/12	356	475
LG&E	TODS	2016/01	356	475
LG&E	TODS	2016/02	356	475
LG&E	TODS	2016/03	356	475
LG&E	TODS	2016/04	356	475
LG&E	TODS	2016/05	356	475
LG&E	TODS	2016/06	416	475
LG&E	TODS	2016/07	478	478
LG&E	TODS	2016/08	467	478
LG&E	TODS	2015/09	368	414
LG&E	TODS	2015/10	350	414
LG&E	TODS	2015/11	338	414

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	344	414
LG&E	TODS	2016/01	336	414
LG&E	TODS	2016/02	335	414
LG&E	TODS	2016/03	332	414
LG&E	TODS	2016/04	332	414
LG&E	TODS	2016/05	371	414
LG&E	TODS	2016/06	400	414
LG&E	TODS	2016/07	401	414
LG&E	TODS	2016/08	401	401
LG&E	TODS	2015/09	284	379
LG&E	TODS	2015/10	284	379
LG&E	TODS	2015/11	284	379
LG&E	TODS	2015/12	284	379
LG&E	TODS	2016/01	284	379
LG&E	TODS	2016/02	284	379
LG&E	TODS	2016/03	284	379
LG&E	TODS	2016/04	284	379
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2015/09	516	571
LG&E	TODS	2015/10	500	571
LG&E	TODS	2015/11	536	571
LG&E	TODS	2015/12	527	571
LG&E	TODS	2016/01	552	571
LG&E	TODS	2016/02	572	572
LG&E	TODS	2016/03	533	572
LG&E	TODS	2016/04	546	572
LG&E	TODS	2016/05	539	572
LG&E	TODS	2016/06	547	572
LG&E	TODS	2016/07	563	572
LG&E	TODS	2016/08	569	572
LG&E	TODS	2016/06	345	345
LG&E	TODS	2016/07	347	347
LG&E	TODS	2016/08	390	390
LG&E	TODS	2015/09	489	545
LG&E	TODS	2015/10	526	545
LG&E	TODS	2015/11	412	545
LG&E	TODS	2015/12	409	545
LG&E	TODS	2016/01	409	545
LG&E	TODS	2016/02	409	545
LG&E	TODS	2016/03	409	545

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/04	409	545
LG&E	TODS	2016/05	431	545
LG&E	TODS	2016/06	464	545
LG&E	TODS	2016/07	511	545
LG&E	TODS	2016/08	562	562
LG&E	TODS	2015/09	250	250
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/11	250	250
LG&E	TODS	2015/12	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2015/09	250	260
LG&E	TODS	2015/10	250	260
LG&E	TODS	2015/11	250	260
LG&E	TODS	2015/12	250	260
LG&E	TODS	2016/01	250	260
LG&E	TODS	2016/02	250	260
LG&E	TODS	2016/03	250	260
LG&E	TODS	2016/04	250	260
LG&E	TODS	2016/05	250	260
LG&E	TODS	2016/06	250	260
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2015/09	838	1,117
LG&E	TODS	2015/10	838	1,117
LG&E	TODS	2015/11	838	1,117
LG&E	TODS	2015/12	838	1,117
LG&E	TODS	2016/01	1,035	1,093
LG&E	TODS	2016/02	1,173	1,173
LG&E	TODS	2016/03	1,030	1,173
LG&E	TODS	2016/04	880	1,173
LG&E	TODS	2016/05	880	1,173
LG&E	TODS	2016/06	880	1,173
LG&E	TODS	2016/07	880	1,173
LG&E	TODS	2016/08	880	1,173
LG&E	TODS	2015/09	428	571
LG&E	TODS	2015/10	428	571

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/11	428	571
LG&E	TODS	2015/12	440	571
LG&E	TODS	2016/01	428	571
LG&E	TODS	2016/02	428	571
LG&E	TODS	2016/03	428	571
LG&E	TODS	2016/04	428	571
LG&E	TODS	2016/05	374	499
LG&E	TODS	2016/06	413	440
LG&E	TODS	2016/07	364	440
LG&E	TODS	2016/08	366	440
LG&E	TODP	2015/09	473	473
LG&E	TODP	2015/10	445	473
LG&E	TODP	2015/11	430	473
LG&E	TODP	2015/12	355	473
LG&E	TODP	2016/01	370	473
LG&E	TODP	2016/02	385	473
LG&E	TODP	2016/03	374	473
LG&E	TODP	2016/04	410	473
LG&E	TODP	2016/05	420	473
LG&E	TODP	2016/06	449	473
LG&E	TODP	2016/07	451	473
LG&E	TODP	2016/08	500	500
LG&E	TODP	2015/09	822	931
LG&E	TODP	2015/10	774	931
LG&E	TODP	2015/11	713	931
LG&E	TODP	2015/12	822	931
LG&E	TODP	2016/01	1,012	1,012
LG&E	TODP	2016/02	941	1,012
LG&E	TODP	2016/03	856	1,012
LG&E	TODP	2016/04	788	1,012
LG&E	TODP	2016/05	759	1,012
LG&E	TODP	2016/06	759	1,012
LG&E	TODP	2016/07	761	1,012
LG&E	TODP	2016/08	765	1,012
LG&E	TODS	2015/09	431	575
LG&E	TODS	2015/10	431	575
LG&E	TODS	2015/11	431	575
LG&E	TODS	2015/12	431	575
LG&E	TODS	2016/01	431	575
LG&E	TODS	2016/02	488	557
LG&E	TODS	2016/03	438	488
LG&E	TODS	2016/04	366	488
LG&E	TODS	2016/05	366	488

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/06	366	488
LG&E	TODS	2016/07	366	488
LG&E	TODS	2016/08	366	488
LG&E	TODS	2015/09	687	760
LG&E	TODS	2015/10	645	760
LG&E	TODS	2015/11	664	760
LG&E	TODS	2015/12	673	760
LG&E	TODS	2016/01	810	810
LG&E	TODS	2016/02	848	848
LG&E	TODS	2016/03	766	848
LG&E	TODS	2016/04	636	848
LG&E	TODS	2016/05	639	848
LG&E	TODS	2016/06	637	848
LG&E	TODS	2016/07	702	848
LG&E	TODS	2016/08	716	848
LG&E	TODS	2015/09	465	470
LG&E	TODS	2015/10	412	470
LG&E	TODS	2015/11	439	470
LG&E	TODS	2015/12	474	474
LG&E	TODS	2016/01	460	474
LG&E	TODS	2016/02	415	474
LG&E	TODS	2016/03	441	474
LG&E	TODS	2016/04	438	474
LG&E	TODS	2016/05	469	474
LG&E	TODS	2016/06	456	474
LG&E	TODS	2016/07	421	474
LG&E	TODS	2016/08	410	474
LG&E	TODP	2015/09	1,228	1,228
LG&E	TODP	2015/10	1,205	1,228
LG&E	TODP	2015/11	1,278	1,278
LG&E	TODP	2015/12	1,247	1,278
LG&E	TODP	2016/01	1,218	1,278
LG&E	TODP	2016/02	2,208	2,208
LG&E	TODP	2016/03	1,656	2,208
LG&E	TODP	2016/04	1,656	2,208
LG&E	TODP	2016/05	1,656	2,208
LG&E	TODP	2016/06	1,656	2,208
LG&E	TODP	2016/07	1,656	2,208
LG&E	TODP	2016/08	1,656	2,208
LG&E	TODS	2015/09	346	350
LG&E	TODS	2015/10	310	350
LG&E	TODS	2015/11	286	350
LG&E	TODS	2015/12	263	350

	High-Level Rate		Base Demand @	Base Demand @
Company	Category	Billing Period	75% Ratchet	100% Ratchet
	Description		(kW)	(kW)
LG&E	TODS	2016/01	263	350
LG&E	TODS	2016/02	263	350
LG&E	TODS	2016/03	269	350
LG&E	TODS	2016/04	283	350
LG&E	TODS	2016/05	285	350
LG&E	TODS	2016/06	309	350
LG&E	TODS	2016/07	309	350
LG&E	TODS	2016/08	308	350
LG&E	TODS	2015/09	501	668
LG&E	TODS	2015/10	501	668
LG&E	TODS	2015/11	501	668
LG&E	TODS	2015/12	501	668
LG&E	TODS	2016/01	501	668
LG&E	TODS	2016/02	501	668
LG&E	TODS	2016/03	492	656
LG&E	TODS	2016/04	284	379
LG&E	TODS	2016/05	284	379
LG&E	TODS	2016/06	284	379
LG&E	TODS	2016/07	284	379
LG&E	TODS	2016/08	284	379
LG&E	TODS	2015/09	527	703
LG&E	TODS	2015/10	527	703
LG&E	TODS	2015/11	527	703
LG&E	TODS	2015/12	689	703
LG&E	TODS	2016/01	780	780
LG&E	TODS	2016/02	920	920
LG&E	TODS	2016/03	715	920
LG&E	TODS	2016/04	690	920
LG&E	TODS	2016/05	690	920
LG&E	TODS	2016/06	690	920
LG&E	TODS	2016/07	690	920
LG&E	TODS	2016/08	690	920
LG&E	TODS	2015/09	1,306	1,741
LG&E	TODS	2015/10	1,306	1,741
LG&E	TODS	2015/11	1,306	1,741
LG&E	TODS	2015/12	1,306	1,741
LG&E	TODS	2016/01	1,322	1,741
LG&E	TODS	2016/02	1,736	1,741
LG&E	TODS	2016/03	1,636	1,736
LG&E	TODS	2016/04	1,403	1,736
LG&E	TODS	2016/05	1,302	1,736
LG&E	TODS	2016/06	1,302	1,736
LG&E	TODS	2016/07	1,302	1,736

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/08	1,302	1,736
LG&E	TODS	2015/12	250	285
LG&E	TODS	2016/01	250	285
LG&E	TODS	2016/02	250	285
LG&E	TODS	2016/03	250	285
LG&E	TODS	2016/04	250	285
LG&E	TODS	2016/05	250	285
LG&E	TODS	2016/06	250	285
LG&E	TODS	2016/07	259	285
LG&E	TODS	2016/08	256	285
LG&E	TODP	2015/09	3,375	4,500
LG&E	TODP	2015/10	3,375	4,500
LG&E	TODP	2015/11	3,375	4,500
LG&E	TODP	2015/12	3,375	4,500
LG&E	TODP	2016/01	3,375	4,500
LG&E	TODP	2016/02	3,375	4,500
LG&E	TODP	2016/03	3,375	4,500
LG&E	TODP	2016/04	3,375	4,500
LG&E	TODP	2016/05	3,375	4,500
LG&E	TODP	2016/06	3,375	4,500
LG&E	TODP	2016/07	3,375	4,500
LG&E	TODP	2016/08	3,375	4,500
LG&E	TODS	2015/09	267	300
LG&E	TODS	2015/10	275	300
LG&E	TODS	2015/11	250	300
LG&E	TODS	2015/12	250	300
LG&E	TODS	2016/01	250	300
LG&E	TODS	2016/02	251	300
LG&E	TODS	2016/03	250	300
LG&E	TODS	2016/04	250	300
LG&E	TODS	2016/05	250	300
LG&E	TODS	2016/06	250	300
LG&E	TODS	2016/07	250	300
LG&E	TODS	2016/08	250	300
LG&E	RTS	2015/09	8,375	8,681
LG&E	RTS	2015/10	8,505	8,681
LG&E	RTS	2015/11	8,115	8,681
LG&E	RTS	2015/12	7,299	8,681
LG&E	RTS	2016/01	7,516	8,681
LG&E	RTS	2016/02	8,502	8,681
LG&E	RTS	2016/03	8,329	8,681
LG&E	RTS	2016/04	8,201	8,681
LG&E	RTS	2016/05	8,115	8,681

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	RTS	2016/06	8,415	8,681
LG&E	RTS	2016/07	8,501	8,505
LG&E	RTS	2016/08	8,415	8,505
LG&E	TODS	2015/09	255	340
LG&E	TODS	2015/10	312	340
LG&E	TODS	2015/11	255	340
LG&E	TODS	2015/12	255	340
LG&E	TODS	2016/01	255	340
LG&E	TODS	2016/02	250	320
LG&E	TODS	2016/03	250	320
LG&E	TODS	2016/04	250	320
LG&E	TODS	2016/05	334	334
LG&E	TODS	2016/06	349	349
LG&E	TODS	2016/07	262	349
LG&E	TODS	2016/08	262	349
LG&E	TODP	2015/09	2,117	2,270
LG&E	TODP	2015/10	1,822	2,270
LG&E	TODP	2015/11	1,702	2,270
LG&E	TODP	2015/12	1,702	2,270
LG&E	TODP	2016/01	1,702	2,270
LG&E	TODP	2016/02	1,702	2,270
LG&E	TODP	2016/03	1,702	2,270
LG&E	TODP	2016/04	1,702	2,270
LG&E	TODP	2016/05	1,702	2,270
LG&E	TODP	2016/06	2,301	2,301
LG&E	TODP	2016/07	2,319	2,319
LG&E	TODP	2016/08	2,365	2,365
LG&E	TODP	2015/09	2,326	2,344
LG&E	TODP	2015/10	2,223	2,344
LG&E	TODP	2015/11	1,758	2,344
LG&E	TODP	2015/12	1,758	2,344
LG&E	TODP	2016/01	1,758	2,344
LG&E	TODP	2016/02	1,758	2,344
LG&E	TODP	2016/03	1,758	2,344
LG&E	TODP	2016/04	1,758	2,344
LG&E	TODP	2016/05	2,053	2,344
LG&E	TODP	2016/06	2,320	2,344
LG&E	TODP	2016/07	2,299	2,326
LG&E	TODP	2016/08	2,302	2,326
LG&E	TODP	2015/09	975	1,300
LG&E	TODP	2015/10	975	1,300
LG&E	TODP	2015/11	975	1,300
LG&E	TODP	2015/12	975	1,300

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/01	975	1,300
LG&E	TODP	2016/02	975	1,300
LG&E	TODP	2016/03	975	1,300
LG&E	TODP	2016/04	975	1,300
LG&E	TODP	2016/05	975	1,300
LG&E	TODP	2016/06	975	1,300
LG&E	TODP	2016/07	975	1,300
LG&E	TODP	2016/08	975	1,300
LG&E	TODS	2015/09	675	900
LG&E	TODS	2015/10	675	900
LG&E	TODS	2015/11	675	900
LG&E	TODS	2015/12	675	900
LG&E	TODS	2016/01	675	900
LG&E	TODS	2016/02	675	900
LG&E	TODS	2016/03	675	900
LG&E	TODS	2016/04	675	900
LG&E	TODS	2016/05	675	900
LG&E	TODS	2016/06	675	900
LG&E	TODS	2016/07	675	900
LG&E	TODS	2016/08	675	900
LG&E	TODS	2015/09	488	650
LG&E	TODS	2015/10	488	650
LG&E	TODS	2015/11	488	650
LG&E	TODS	2015/12	488	650
LG&E	TODS	2016/01	488	650
LG&E	TODS	2016/02	488	650
LG&E	TODS	2016/03	488	650
LG&E	TODS	2016/04	488	650
LG&E	TODS	2015/09	660	697
LG&E	TODS	2015/10	623	697
LG&E	TODS	2015/11	523	697
LG&E	TODS	2015/12	523	697
LG&E	TODS	2016/01	523	697
LG&E	TODS	2016/02	523	697
LG&E	TODS	2016/03	523	697
LG&E	TODS	2016/04	523	697
LG&E	TODS	2016/05	534	697
LG&E	TODS	2016/06	668	668
LG&E	TODS	2016/07	660	668
LG&E	TODS	2016/08	653	668
LG&E	TODS	2015/09	278	350
LG&E	TODS	2015/10	281	350
LG&E	TODS	2015/11	263	350

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	263	350
LG&E	TODS	2016/01	263	350
LG&E	TODS	2016/02	263	350
LG&E	TODS	2016/03	263	350
LG&E	TODS	2016/04	263	350
LG&E	TODS	2016/05	263	350
LG&E	TODS	2016/06	270	350
LG&E	TODS	2016/07	289	350
LG&E	TODS	2016/08	274	350
LG&E	TODS	2015/09	509	678
LG&E	TODS	2015/10	509	678
LG&E	TODS	2015/11	509	678
LG&E	TODS	2015/12	512	678
LG&E	TODS	2016/01	721	721
LG&E	TODS	2016/02	636	721
LG&E	TODS	2016/03	569	721
LG&E	TODS	2016/04	541	721
LG&E	TODS	2016/05	541	721
LG&E	TODS	2016/06	541	721
LG&E	TODS	2016/07	541	721
LG&E	TODS	2016/08	541	721
LG&E	TODS	2015/09	705	940
LG&E	TODS	2015/10	705	940
LG&E	TODS	2015/11	705	940
LG&E	TODS	2015/12	705	940
LG&E	TODS	2016/01	705	940
LG&E	TODS	2016/02	705	940
LG&E	TODS	2016/03	705	940
LG&E	TODS	2016/04	705	940
LG&E	TODS	2016/05	705	940
LG&E	TODS	2016/06	705	940
LG&E	TODS	2016/07	705	940
LG&E	TODS	2016/08	705	940
LG&E	TODS	2015/09	410	410
LG&E	TODS	2015/10	430	430
LG&E	TODS	2015/11	400	430
LG&E	TODS	2015/12	396	430
LG&E	TODS	2016/01	398	430
LG&E	TODS	2016/02	397	430
LG&E	TODS	2016/03	392	430
LG&E	TODS	2016/04	422	430
LG&E	TODS	2016/05	426	430
LG&E	TODS	2016/06	430	430

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	450	450
LG&E	TODS	2016/08	447	450
LG&E	TODP	2015/09	466	475
LG&E	TODP	2015/10	437	474
LG&E	TODP	2015/11	428	474
LG&E	TODP	2015/12	396	466
LG&E	TODP	2016/01	349	466
LG&E	TODP	2016/02	349	466
LG&E	TODP	2016/03	471	471
LG&E	TODP	2016/04	414	471
LG&E	TODP	2016/05	353	471
LG&E	TODP	2016/06	353	471
LG&E	TODP	2016/07	353	471
LG&E	TODP	2016/08	439	471
LG&E	TODS	2015/09	368	490
LG&E	TODS	2015/10	368	490
LG&E	TODS	2015/11	368	490
LG&E	TODS	2015/12	368	490
LG&E	TODS	2016/01	374	490
LG&E	TODS	2016/02	368	490
LG&E	TODS	2016/03	368	490
LG&E	TODS	2016/04	368	490
LG&E	TODS	2016/05	377	490
LG&E	TODS	2016/06	449	490
LG&E	TODS	2016/07	487	490
LG&E	TODS	2016/08	492	492
LG&E	TODS	2015/09	578	581
LG&E	TODS	2015/10	487	581
LG&E	TODS	2015/11	468	581
LG&E	TODS	2015/12	454	581
LG&E	TODS	2016/02	442	581
LG&E	TODS	2016/03	437	581
LG&E	TODS	2016/04	449	581
LG&E	TODS	2016/05	530	581
LG&E	TODS	2016/06	602	602
LG&E	TODS	2016/07	598	602
LG&E	TODS	2016/08	598	602
LG&E	TODS	2015/09	375	500
LG&E	TODS	2015/10	375	500
LG&E	TODS	2015/11	375	500
LG&E	TODS	2015/12	375	500
LG&E	TODS	2016/01	410	500
LG&E	TODS	2016/02	391	500

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/03	375	500
LG&E	TODS	2016/04	375	500
LG&E	TODS	2016/05	375	500
LG&E	TODS	2016/06	375	500
LG&E	TODS	2016/07	375	500
LG&E	TODS	2016/08	375	500
LG&E	TODS	2015/09	750	1,000
LG&E	TODS	2015/10	750	1,000
LG&E	TODS	2015/09	867	880
LG&E	TODS	2015/10	779	880
LG&E	TODS	2015/11	733	880
LG&E	TODS	2015/12	714	880
LG&E	TODS	2016/01	826	880
LG&E	TODS	2016/02	806	880
LG&E	TODS	2016/03	746	880
LG&E	TODS	2016/04	758	880
LG&E	TODS	2016/05	778	880
LG&E	TODS	2016/06	837	880
LG&E	TODS	2016/07	811	880
LG&E	TODS	2016/08	856	880
LG&E	TODS	2015/09	570	760
LG&E	TODS	2015/10	570	760
LG&E	TODS	2015/11	637	760
LG&E	TODS	2015/12	710	760
LG&E	TODS	2016/01	720	760
LG&E	TODS	2016/02	742	760
LG&E	TODS	2016/03	710	760
LG&E	TODS	2016/04	715	760
LG&E	TODS	2016/05	618	760
LG&E	TODS	2016/06	610	760
LG&E	TODS	2016/07	570	760
LG&E	TODS	2016/08	570	760
LG&E	TODS	2015/09	925	962
LG&E	TODS	2015/10	877	962
LG&E	TODS	2015/11	810	962
LG&E	TODS	2015/12	721	962
LG&E	TODS	2016/01	747	962
LG&E	TODS	2016/02	766	962
LG&E	TODS	2016/03	810	962
LG&E	TODS	2016/04	778	962
LG&E	TODS	2016/05	816	962
LG&E	TODS	2016/06	846	962
LG&E	TODS	2016/07	891	962

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/08	910	925
LG&E	TODS	2015/09	250	273
LG&E	TODS	2015/10	250	273
LG&E	TODS	2015/11	250	273
LG&E	TODP	2015/09	498	558
LG&E	TODP	2015/10	482	558
LG&E	TODP	2015/11	421	558
LG&E	TODP	2015/12	419	558
LG&E	TODP	2016/01	462	558
LG&E	TODP	2016/02	419	558
LG&E	TODP	2016/03	419	558
LG&E	TODP	2016/04	419	558
LG&E	TODP	2016/05	474	558
LG&E	TODP	2016/06	474	558
LG&E	TODP	2016/07	722	722
LG&E	TODP	2016/08	764	764
LG&E	TODS	2015/09	750	1,000
LG&E	TODS	2015/10	750	1,000
LG&E	TODS	2015/11	750	1,000
LG&E	TODS	2015/12	750	1,000
LG&E	TODS	2016/01	750	1,000
LG&E	TODS	2016/02	750	1,000
LG&E	TODS	2016/03	750	1,000
LG&E	TODS	2016/04	750	1,000
LG&E	TODS	2016/05	750	1,000
LG&E	TODS	2016/06	750	1,000
LG&E	TODS	2016/07	750	1,000
LG&E	TODS	2016/08	750	1,000
LG&E	TODS	2016/02	546	550
LG&E	TODS	2016/03	525	550
LG&E	TODS	2016/04	565	565
LG&E	TODS	2016/05	586	586
LG&E	TODS	2016/06	562	586
LG&E	TODS	2016/07	549	586
LG&E	TODS	2016/08	558	586
LG&E	TODS	2015/09	377	398
LG&E	TODS	2015/10	376	398
LG&E	TODS	2015/11	377	398
LG&E	TODS	2015/12	379	398
LG&E	TODS	2016/01	376	398
LG&E	TODS	2016/02	372	398
LG&E	TODS	2016/03	386	398
LG&E	TODS	2016/04	394	398

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/05	371	398
LG&E	TODS	2016/06	369	398
LG&E	TODS	2016/07	371	398
LG&E	TODS	2016/08	382	398
LG&E	TODS	2015/09	486	523
LG&E	TODS	2015/10	488	523
LG&E	TODS	2015/11	398	523
LG&E	TODS	2015/12	392	523
LG&E	TODS	2016/01	392	523
LG&E	TODS	2016/02	392	523
LG&E	TODS	2016/03	392	523
LG&E	TODS	2016/04	392	523
LG&E	TODS	2016/05	406	523
LG&E	TODS	2016/06	473	523
LG&E	TODS	2016/07	514	523
LG&E	TODS	2016/08	525	525
LG&E	TODS	2015/11	368	490
LG&E	TODS	2015/12	368	490
LG&E	TODS	2016/01	368	490
LG&E	TODS	2016/02	368	490
LG&E	TODS	2016/03	368	490
LG&E	TODS	2016/04	368	490
LG&E	TODS	2016/05	368	490
LG&E	TODS	2016/06	368	490
LG&E	TODS	2016/07	429	490
LG&E	TODS	2016/08	427	490
LG&E	TODS	2015/11	251	335
LG&E	TODS	2015/12	274	335
LG&E	TODS	2016/01	297	335
LG&E	TODS	2016/02	251	335
LG&E	TODS	2016/03	251	335
LG&E	TODS	2016/04	251	335
LG&E	TODS	2016/05	251	335
LG&E	TODS	2016/06	282	335
LG&E	TODS	2016/07	252	335
LG&E	TODS	2016/08	307	335
LG&E	TODS	2015/09	347	398
LG&E	TODS	2015/10	299	398
LG&E	TODS	2015/11	299	398
LG&E	TODS	2015/12	299	398
LG&E	TODS	2016/01	299	398
LG&E	TODS	2016/02	299	398
LG&E	TODS	2016/03	299	398

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/04	299	398
LG&E	TODS	2016/05	299	398
LG&E	TODS	2016/06	322	398
LG&E	TODS	2016/07	366	398
LG&E	TODS	2016/08	351	376
LG&E	TODS	2015/09	340	398
LG&E	TODS	2015/10	299	398
LG&E	TODS	2015/11	299	398
LG&E	TODS	2015/12	311	398
LG&E	TODS	2016/01	304	398
LG&E	TODS	2016/02	333	398
LG&E	TODS	2016/03	346	398
LG&E	TODS	2016/04	299	398
LG&E	TODS	2016/05	299	398
LG&E	TODS	2016/06	299	398
LG&E	TODS	2016/07	299	398
LG&E	TODS	2016/08	299	398
LG&E	TODS	2015/09	1,110	1,480
LG&E	TODS	2015/10	1,110	1,480
LG&E	TODS	2015/11	1,110	1,480
LG&E	TODS	2015/09	250	325
LG&E	TODS	2015/10	250	325
LG&E	TODS	2015/11	250	325
LG&E	TODS	2015/12	250	325
LG&E	TODS	2016/01	250	325
LG&E	TODS	2016/02	250	325
LG&E	TODS	2016/03	250	325
LG&E	TODS	2016/04	250	325
LG&E	TODS	2015/09	436	455
LG&E	TODS	2015/10	373	455
LG&E	TODS	2015/11	378	455
LG&E	TODS	2015/12	341	455
LG&E	TODS	2016/01	352	455
LG&E	TODS	2016/02	341	455
LG&E	TODS	2016/03	341	455
LG&E	TODS	2016/04	341	455
LG&E	TODS	2016/05	372	455
LG&E	TODS	2016/06	426	455
LG&E	TODS	2016/07	432	455
LG&E	TODS	2016/08	439	439
LG&E	TODS	2015/09	250	325
LG&E	TODS	2015/10	250	325
LG&E	TODS	2015/11	250	325

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2015/12	250	325
LG&E	TODS	2016/01	250	325
LG&E	TODS	2016/02	250	325
LG&E	TODS	2016/03	250	325
LG&E	TODS	2016/04	250	325
LG&E	TODS	2016/05	250	325
LG&E	TODS	2016/06	250	325
LG&E	TODS	2016/07	250	325
LG&E	TODS	2016/08	283	325
LG&E	TODP	2015/09	738	738
LG&E	TODP	2015/10	771	771
LG&E	TODP	2015/11	598	771
LG&E	TODP	2015/12	579	771
LG&E	TODP	2016/01	579	771
LG&E	TODP	2016/02	579	771
LG&E	TODP	2016/03	579	771
LG&E	TODP	2016/04	579	771
LG&E	TODP	2016/05	658	771
LG&E	TODP	2016/06	700	771
LG&E	TODP	2016/07	819	819
LG&E	TODP	2016/08	810	819
LG&E	TODP	2015/09	954	1,000
LG&E	TODP	2015/10	897	1,000
LG&E	TODP	2015/11	877	1,000
LG&E	TODP	2015/12	850	1,000
LG&E	TODP	2016/01	845	1,000
LG&E	TODP	2016/02	819	1,000
LG&E	TODP	2016/03	857	1,000
LG&E	TODP	2016/04	884	1,000
LG&E	TODP	2016/05	884	1,000
LG&E	TODP	2016/06	948	1,000
LG&E	TODP	2016/07	968	1,000
LG&E	TODP	2016/08	988	988
LG&E	TODS	2015/09	1,235	1,300
LG&E	TODS	2015/10	1,200	1,300
LG&E	TODS	2015/11	1,184	1,300
LG&E	TODS	2015/12	1,283	1,300
LG&E	TODS	2016/01	1,202	1,300
LG&E	TODS	2016/02	1,053	1,300
LG&E	TODS	2016/03	1,026	1,300
LG&E	TODS	2016/04	1,104	1,300
LG&E	TODS	2016/05	1,048	1,300
LG&E	TODS	2016/06	1,030	1,300

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	1,237	1,300
LG&E	TODS	2016/08	1,454	1,454
LG&E	TODS	2015/09	250	250
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/11	250	250
LG&E	TODS	2015/12	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2015/09	1,361	1,814
LG&E	TODS	2015/10	1,361	1,814
LG&E	TODS	2015/11	1,361	1,814
LG&E	TODS	2015/12	1,448	1,814
LG&E	TODS	2016/01	1,550	1,814
LG&E	TODS	2016/02	1,757	1,814
LG&E	TODS	2016/03	1,700	1,757
LG&E	TODS	2016/04	1,421	1,757
LG&E	TODS	2016/05	1,347	1,757
LG&E	TODS	2016/06	1,318	1,757
LG&E	TODS	2016/07	1,318	1,757
LG&E	TODS	2016/08	1,318	1,757
LG&E	TODS	2015/09	2,234	2,361
LG&E	TODS	2015/10	2,229	2,361
LG&E	TODS	2015/11	2,005	2,361
LG&E	TODS	2015/12	1,900	2,361
LG&E	TODS	2016/01	1,771	2,361
LG&E	TODS	2016/02	1,960	2,361
LG&E	TODS	2016/03	1,771	2,361
LG&E	TODS	2016/04	1,958	2,361
LG&E	TODS	2016/05	2,017	2,361
LG&E	TODS	2016/06	2,035	2,361
LG&E	TODS	2016/07	2,304	2,361
LG&E	TODS	2016/08	2,306	2,306
LG&E	TODS	2015/09	250	250
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/11	250	250
LG&E	TODS	2015/12	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2015/09	1,165	1,199
LG&E	TODS	2015/10	1,121	1,199
LG&E	TODS	2015/11	1,075	1,199
LG&E	TODS	2015/12	1,048	1,199
LG&E	TODS	2016/01	1,030	1,199

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	1,051	1,199
LG&E	TODS	2016/03	1,033	1,199
LG&E	TODS	2016/04	1,053	1,199
LG&E	TODS	2016/05	1,097	1,199
LG&E	TODS	2016/06	1,154	1,188
LG&E	TODS	2016/07	1,210	1,210
LG&E	TODS	2016/08	1,198	1,210
LG&E	TODP	2016/06	648	648
LG&E	TODP	2016/07	643	648
LG&E	TODP	2016/08	634	648
LG&E	TODS	2015/09	250	250
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/11	250	250
LG&E	TODS	2015/12	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2015/09	250	250
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/09	511	630
LG&E	TODS	2015/10	494	630
LG&E	TODS	2015/11	473	630
LG&E	TODS	2015/12	473	630
LG&E	TODS	2016/01	473	630
LG&E	TODS	2016/02	473	630
LG&E	TODS	2016/03	473	630
LG&E	TODS	2016/04	473	630
LG&E	TODS	2016/05	473	630
LG&E	TODS	2016/06	473	630
LG&E	TODS	2016/07	473	630
LG&E	TODS	2016/08	473	630
LG&E	TODS	2015/10	580	670
LG&E	TODS	2015/11	503	670
LG&E	TODS	2015/12	503	670
LG&E	TODS	2016/01	503	670
LG&E	TODS	2016/02	503	670
LG&E	TODS	2016/03	503	670
LG&E	TODS	2016/04	503	670
LG&E	TODS	2016/05	503	670
LG&E	TODS	2016/06	503	670
LG&E	TODS	2016/07	671	671
LG&E	TODS	2016/08	539	671
LG&E	TODS	2015/09	271	284
LG&E	TODS	2015/10	250	284

	High-Level Rate		Base Demand @	Base Demand @
Company	Category	Billing Period	75% Ratchet	100% Ratchet
company	Description		(kW)	(kW)
LG&E	TODS	2015/11	250	284
LG&E	TODS	2015/12	250	284
LG&E	TODS	2016/01	250	284
LG&E	TODS	2016/02	250	284
LG&E	TODS	2016/03	250	284
LG&E	TODS	2016/04	250	284
LG&E	TODS	2016/05	251	284
LG&E	TODS	2016/06	272	284
LG&E	TODS	2016/07	288	288
LG&E	TODS	2016/08	286	288
LG&E	TODS	2015/09	1,110	1,480
LG&E	TODS	2015/10	1,110	1,480
LG&E	TODS	2015/11	1,110	1,480
LG&E	TODS	2015/12	1,110	1,480
LG&E	TODS	2016/01	1,110	1,480
LG&E	TODS	2016/02	1,110	1,480
LG&E	TODS	2016/03	1,110	1,480
LG&E	TODS	2015/09	1,147	1,180
LG&E	TODS	2015/10	1,078	1,180
LG&E	TODS	2015/11	1,061	1,180
LG&E	TODS	2015/12	981	1,180
LG&E	TODS	2016/01	923	1,180
LG&E	TODS	2016/02	915	1,180
LG&E	TODS	2016/03	966	1,180
LG&E	TODS	2016/04	1,010	1,180
LG&E	TODS	2016/05	1,002	1,180
LG&E	TODS	2016/06	1,062	1,180
LG&E	TODS	2016/07	1,136	1,180
LG&E	TODS	2016/08	1,114	1,180
LG&E	TODS	2016/03	943	943
LG&E	TODS	2016/04	744	943
LG&E	TODS	2016/05	707	943
LG&E	TODS	2016/06	743	943
LG&E	TODS	2016/07	785	943
LG&E	TODS	2016/08	752	943
LG&E	TODS	2015/10	1,234	1,234
LG&E	TODS	2015/11	1,233	1,234
LG&E	TODS	2015/12	1,461	1,461
LG&E	TODS	2016/01	1,772	1,772
LG&E	TODS	2016/02	1,827	1,827
LG&E	TODS	2016/03	1,474	1,827
LG&E	TODS	2016/04	1,379	1,827
LG&E	TODS	2016/05	1,371	1,827

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/06	1,371	1,827
LG&E	TODS	2016/07	1,412	1,827
LG&E	TODS	2016/08	1,503	1,827
LG&E	TODS	2015/09	1,500	2,000
LG&E	TODS	2015/10	1,500	2,000
LG&E	TODS	2015/11	1,500	2,000
LG&E	TODS	2015/12	1,500	2,000
LG&E	TODS	2016/01	1,500	2,000
LG&E	TODS	2016/02	1,500	2,000
LG&E	TODS	2016/03	1,500	2,000
LG&E	TODS	2016/04	1,500	2,000
LG&E	TODS	2016/05	1,500	2,000
LG&E	TODS	2016/06	1,500	2,000
LG&E	TODS	2016/07	1,500	2,000
LG&E	TODS	2016/08	1,500	2,000
LG&E	TODP	2015/09	5,223	5,223
LG&E	TODP	2015/10	5,310	5,310
LG&E	TODP	2015/11	5,300	5,310
LG&E	TODP	2015/12	5,149	5,310
LG&E	TODP	2016/01	5,015	5,310
LG&E	TODP	2016/02	5,102	5,310
LG&E	TODP	2016/03	5,059	5,310
LG&E	TODP	2016/04	5,156	5,310
LG&E	TODP	2016/05	5,236	5,310
LG&E	TODP	2016/06	5,291	5,310
LG&E	TODP	2016/07	5,403	5,403
LG&E	TODP	2016/08	5,243	5,403
LG&E	TODS	2015/10	641	800
LG&E	TODS	2015/11	646	800
LG&E	TODS	2015/12	614	800
LG&E	TODS	2016/01	600	800
LG&E	TODS	2016/02	600	800
LG&E	TODS	2016/03	600	800
LG&E	TODS	2016/04	600	800
LG&E	TODS	2016/05	600	800
LG&E	TODS	2016/06	646	800
LG&E	TODS	2016/07	701	800
LG&E	TODS	2016/08	698	800
LG&E	TODP	2015/09	15,094	15,094
LG&E	TODP	2015/10	13,494	15,094
LG&E	TODP	2015/11	13,909	15,094
LG&E	TODP	2015/12	14,166	15,094
LG&E	TODP	2016/01	14,581	15,094

	High-Level Rate		Base Demand @	Base Demand @
Company	Category	Billing Period	75% Ratchet	100% Ratchet
	Description	-	(kW)	(kW)
LG&E	TODP	2016/02	14,008	15,094
LG&E	TODP	2016/03	13,970	15,094
LG&E	TODP	2016/04	14,544	15,094
LG&E	TODP	2016/05	12,289	15,094
LG&E	TODP	2016/06	13,277	15,094
LG&E	TODP	2016/07	13,494	15,094
LG&E	TODP	2016/08	15,292	15,292
LG&E	TODS	2015/09	390	520
LG&E	TODS	2015/10	390	520
LG&E	TODS	2015/11	390	520
LG&E	TODS	2015/12	390	520
LG&E	TODS	2016/01	390	520
LG&E	TODS	2016/02	390	520
LG&E	TODS	2016/03	390	520
LG&E	TODS	2016/04	390	520
LG&E	TODS	2016/05	390	520
LG&E	TODS	2016/06	390	520
LG&E	TODS	2016/07	390	520
LG&E	TODS	2016/08	390	520
LG&E	TODS	2015/10	250	250
LG&E	TODS	2015/11	394	394
LG&E	TODS	2015/12	571	571
LG&E	TODS	2016/01	488	571
LG&E	TODS	2016/02	534	571
LG&E	TODS	2016/03	491	571
LG&E	TODS	2016/04	428	571
LG&E	TODS	2016/05	428	571
LG&E	TODS	2016/06	428	571
LG&E	TODS	2016/07	428	571
LG&E	TODS	2016/08	428	571
LG&E	TODS	2016/01	471	471
LG&E	TODS	2016/02	481	481
LG&E	TODS	2016/03	512	512
LG&E	TODS	2016/04	526	526
LG&E	TODS	2016/05	556	556
LG&E	TODS	2016/06	620	620
LG&E	TODS	2016/07	604	620
LG&E	TODS	2016/08	634	634
LG&E	TODS	2015/09	563	750
LG&E	TODS	2015/10	563	750
LG&E	TODS	2015/11	563	750
LG&E	TODS	2015/12	563	750
LG&E	TODS	2015/12	563	750
-001		_010/01	505	750

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	563	750
LG&E	TODS	2016/03	563	750
LG&E	TODS	2016/04	563	750
LG&E	TODS	2016/05	563	750
LG&E	TODS	2016/06	563	750
LG&E	TODS	2016/07	563	750
LG&E	TODS	2016/08	563	750
LG&E	TODS	2016/04	293	390
LG&E	TODS	2016/05	293	390
LG&E	TODS	2016/06	293	390
LG&E	TODS	2016/07	329	390
LG&E	TODS	2016/08	326	390
LG&E	TODS	2016/07	474	474
LG&E	TODS	2016/08	425	474
LG&E	TODS	2015/11	250	250
LG&E	TODS	2015/12	769	1,025
LG&E	TODS	2016/01	769	1,025
LG&E	TODS	2016/02	769	1,025
LG&E	TODS	2016/03	769	1,025
LG&E	TODS	2016/04	769	1,025
LG&E	TODS	2016/05	769	1,025
LG&E	TODS	2016/06	769	1,025
LG&E	TODS	2016/07	769	1,025
LG&E	TODS	2016/08	769	1,025
LG&E	TODS	2015/12	296	296
LG&E	TODS	2016/01	312	312
LG&E	TODS	2016/02	298	312
LG&E	TODS	2016/03	310	312
LG&E	TODS	2016/04	299	312
LG&E	TODS	2016/05	280	312
LG&E	TODS	2016/06	278	312
LG&E	TODS	2016/07	294	312
LG&E	TODS	2016/08	306	312
LG&E	TODS	2015/12	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	265	265
LG&E	TODS	2016/08	274	274
LG&E	TODS	2016/07	338	450

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/08	338	450
LG&E	TODS	2015/12	413	413
LG&E	TODS	2016/01	382	413
LG&E	TODS	2016/02	355	413
LG&E	TODS	2016/03	386	413
LG&E	TODS	2016/04	365	413
LG&E	TODS	2016/05	466	466
LG&E	TODS	2016/06	499	499
LG&E	TODS	2016/07	494	499
LG&E	TODS	2016/08	530	530
LG&E	TODS	2016/01	695	695
LG&E	TODS	2016/02	684	695
LG&E	TODS	2016/03	682	695
LG&E	TODS	2016/04	661	695
LG&E	TODS	2016/05	655	695
LG&E	TODS	2016/06	954	954
LG&E	TODS	2016/07	991	991
LG&E	TODS	2016/08	1,152	1,152
LG&E	TODS	2016/01	440	440
LG&E	TODS	2016/02	453	453
LG&E	TODS	2016/03	440	453
LG&E	TODS	2016/04	448	453
LG&E	TODS	2016/05	506	506
LG&E	TODS	2016/06	459	506
LG&E	TODS	2016/07	398	506
LG&E	TODS	2016/08	406	506
LG&E	RTS	2016/01	3,208	3,208
LG&E	RTS	2016/02	2,553	3,208
LG&E	RTS	2016/03	2,406	3,208
LG&E	RTS	2016/04	2,406	3,208
LG&E	RTS	2016/05	2,406	3,208
LG&E	RTS	2016/06	2,406	3,208
LG&E	RTS	2016/07	2,687	3,208
LG&E	RTS	2016/08	2,406	3,208
LG&E	TODS	2016/01	352	352
LG&E	TODS	2016/02	364	364
LG&E	TODS	2016/03	289	364
LG&E	TODS	2016/04	273	364
LG&E	TODS	2016/05	273	364
LG&E	TODS	2016/06	298	364
LG&E	TODS	2016/07	273	364
LG&E	TODS	2016/08	273	364
LG&E	TODS	2016/01	253	253

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/02	440	440
LG&E	TODS	2016/03	330	440
LG&E	TODS	2016/04	330	440
LG&E	TODS	2016/05	330	440
LG&E	TODS	2016/06	330	440
LG&E	TODS	2016/07	330	440
LG&E	TODS	2016/08	330	440
LG&E	TODS	2016/01	480	640
LG&E	TODS	2016/02	480	640
LG&E	TODS	2016/03	480	640
LG&E	TODS	2016/04	480	640
LG&E	TODS	2016/05	480	640
LG&E	TODS	2016/06	480	640
LG&E	TODS	2016/07	480	640
LG&E	TODS	2016/08	480	640
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2016/01	250	250
LG&E	TODS	2016/02	506	675
LG&E	TODS	2016/03	506	675
LG&E	TODS	2016/04	506	675
LG&E	TODS	2016/05	506	675
LG&E	TODS	2016/06	506	675
LG&E	TODS	2016/07	506	675
LG&E	TODS	2016/08	506	675
LG&E	TODP	2016/02	260	260
LG&E	TODP	2016/03	331	331
LG&E	TODP	2016/04	329	331
LG&E	TODP	2016/05	363	363

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODP	2016/06	475	475
LG&E	TODP	2016/07	460	475
LG&E	TODP	2016/08	485	485
LG&E	TODS	2016/06	332	332
LG&E	TODS	2016/07	374	374
LG&E	TODS	2016/08	284	374
LG&E	TODS	2016/03	1,313	1,750
LG&E	TODS	2016/04	1,313	1,750
LG&E	TODS	2016/05	1,313	1,750
LG&E	TODS	2016/06	1,313	1,750
LG&E	TODS	2016/07	1,313	1,750
LG&E	TODS	2016/08	1,313	1,750
LG&E	TODS	2016/02	638	850
LG&E	TODS	2016/03	638	850
LG&E	TODS	2016/04	638	850
LG&E	TODS	2016/05	638	850
LG&E	TODS	2016/06	638	850
LG&E	TODS	2016/07	638	850
LG&E	TODS	2016/08	638	850
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	924	1,000
LG&E	TODS	2016/05	858	1,000
LG&E	TODS	2016/06	750	1,000
LG&E	TODS	2016/07	750	1,000
LG&E	TODS	2016/08	942	1,000
LG&E	TODS	2016/02	1,125	1,500
LG&E	TODS	2016/03	1,125	1,500
LG&E	TODS	2016/04	1,125	1,500
LG&E	TODS	2016/05	1,125	1,500
LG&E	TODS	2016/06	1,125	1,500
LG&E	TODS	2016/07	1,125	1,500
LG&E	TODS	2016/08	1,125	1,500
LG&E	TODS	2016/03	431	431
LG&E	TODS	2016/04	323	431
LG&E	TODS	2016/05	323	431
LG&E	TODS	2016/06	323	431
LG&E	TODS	2016/07	323	431
LG&E	TODS	2016/08	323	431
LG&E	TODS	2016/03	1,050	1,400
LG&E	TODS	2016/04	1,050	1,400
LG&E	TODS	2016/05	1,050	1,400
LG&E	TODS	2016/06	1,050	1,400

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	1,050	1,400
LG&E	TODS	2016/08	1,050	1,400
LG&E	TODP	2016/02	250	250
LG&E	TODP	2016/03	250	250
LG&E	TODP	2016/04	250	250
LG&E	TODP	2016/05	365	365
LG&E	TODP	2016/06	401	401
LG&E	TODP	2016/07	726	726
LG&E	TODP	2016/08	717	726
LG&E	TODS	2016/02	250	250
LG&E	TODS	2016/03	806	1,075
LG&E	TODS	2016/04	806	1,075
LG&E	TODS	2016/05	806	1,075
LG&E	TODS	2016/06	806	1,075
LG&E	TODS	2016/07	806	1,075
LG&E	TODS	2016/08	806	1,075
LG&E	TODS	2016/03	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2016/04	250	250
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	278	278
LG&E	TODS	2016/05	656	875
LG&E	TODS	2016/06	656	875
LG&E	TODS	2016/07	656	875
LG&E	TODS	2016/08	656	875
LG&E	TODS	2016/05	338	450
LG&E	TODS	2016/06	338	450
LG&E	TODS	2016/07	338	450
LG&E	TODS	2016/08	338	450
LG&E	TODS	2016/05	250	250
LG&E	TODS	2016/06	281	281
LG&E	TODS	2016/07	251	281
LG&E	TODS	2016/08	260	281
LG&E	TODP	2016/06	3,900	5,200
LG&E	TODP	2016/07	3,900	5,200
LG&E	TODP	2016/08	3,900	5,200
LG&E	TODS	2016/06	250	250

Company	High-Level Rate Category Description	Billing Period	Base Demand @ 75% Ratchet (kW)	Base Demand @ 100% Ratchet (kW)
LG&E	TODS	2016/07	338	338
LG&E	TODS	2016/08	339	339
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	TODS	2016/06	250	250
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	250	250
LG&E	RTS	2016/07	32,931	32,931
LG&E	RTS	2016/08	33,175	33,175
LG&E	TODS	2016/07	250	250
LG&E	TODS	2016/08	398	398
LG&E	TODP	2016/08	862	1,100
LG&E	TODP	2016/08	1,051	1,051
LG&E	TODP	2016/08	250	250

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to First Set of Data Requests of Kentucky Industrial Utility Customers, Inc. Dated January 11, 2017

Question No. 95

Responding Witness: William S. Seelye

- Q.1-95. With regard to Schedule M-2.3-E pages 3-24, please explain how the total Base Demand charge revenue requirement for Rates TOD-Secondary, TOD-Primary and RTS were each determined.
- A.1-95. The Base Demand Charge revenue requirement corresponds to the transmission and distribution demand-related costs from the cost of service. Specifically, Base Demand Charge revenue requirements include the fixed demand cost portions of depreciation expenses, operation and maintenance expenses, return on investment, income taxes less miscellaneous revenues.