FILED. October 23, 2018 **Data Center** Missouri Public Service Commission

Exhibit No.:

Issues:

Standby Service Rider

Witness:

Barbara J. Meyer

Sponsoring Party:

Missouri Department of Economic Development -

Division of Energy

Type of Exhibit:

Surrebuttal Testimony

Case Nos.:

ER-2018-0145

ER-2018-0146

MISSOURI PUBLIC SERVICE COMMISSION

KANSAS CITY POWER & LIGHT COMPANY KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NOs. ER-2018-0145 and ER-2018-0146

SURREBUTTAL TESTIMONY

OF

BARBARA J. MEYER

ON

BEHALF OF

MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT

DVISION OF ENERGY

Jefferson City, Missouri September 4, 2018

> MUDIT En Date_10/3 File No. ER-2018-0145

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Co	the Matter of Kansas City Power & Light) ompany's Request for Authority to Implement) File No. ER-2018-0145 General Rate Increase for Electric Service)
Op To	the Matter of KCP&L Greater Missouri) perations Company's Request for Authority) File No. ER-2018-0146 Implement a General Rate Increase for) pectric Service)
	AFFIDAVIT OF BARBARA J. MEYER
ST	TATE OF MISSOURI)
CC) ss DUNTY OF COLE)
	Barbara J. Meyer, of lawful age, being duly sworn on her oath, deposes and states:
1.	My name is Barbara J. Meyer. I work in the City of Jefferson, Missouri, and I am
	employed by the Missouri Department of Economic Development as an Energy
	Engineer, Division of Energy.
2.	Attached hereto and made a part hereof for all purposes is my Surrebuttal
	Testimony on behalf of the Missouri Department of Economic Development -
	Division of Energy.
3.	I hereby swear and affirm that my answers contained in the attached testimony to
	the questions therein propounded are true and correct to the best of my knowledge.
	Barbara Meeyer
Su	Bafbara J.Meyer bscribed and sworn to before me this 4 th date of September, 2018.
	Hame an And
My	Notary Public Commission expires:
	Notary Public - Notary Seal State of Missouri Commissioned for Callaway County My Commission Expires: April 26, 2020 Commission Number: 16808714

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- INTRODUCTION AND PURPOSE OF TESTIMONY I. 1 2 Q. Please state your name and business address. 3 Α. My name is Barbara J. Meyer. My business address is 301 West High Street. 4 Suite 720, PO Box 1766, Jefferson City, Missouri 65102. 5 Q. By whom and in what capacity are you employed? A. 6 I am employed by the Missouri Department of Economic Development, Division 7 of Energy ("DE") as an Energy Engineer. 8 Q. Have you previously filed testimony before the Missouri Public Service 9 Commission ("Commission")? A. 10 No. 11 Q. Please describe your educational background and employment service. 12 Α. I received both Bachelor of Science and Master of Science degrees in Mechanical Engineering from the University of Missouri in Columbia and am 13 14 registered as a Professional Engineer in Missouri. I have over 20 years of 15 experience in the energy industry working for a variety of firms including electric 16 utilities, engineering consultants, and original equipment manufacturers, and I 17 have direct experience in the design of combined heat and power ("CHP") 18 systems. I began work for DE in 2014. I led DE's participation in the U.S.
- participated in the year-long Standby Service Rider ("SSR") collaborative
 workshop initiated by Union Electric Company d/b/a Ameren Missouri ("Ameren
 Missouri") pursuant to the Non-Unanimous Stipulation and Agreement in Case

Department of Energy's Combined Heat and Power for Resiliency Accelerator.

- No. ER-2014-0258, and provided technical analysis of SSRs in support of DE's recommendations.

 Q. What is the purpose of your Surrebuttal Testimony?
 - A. The purpose of my Surrebuttal Testimony is to present the approach used by DE to resolve our concerns with the SSR proposed by Kansas City Power & Light Company ("KCP&L") and KCP&L Greater Missouri Operations Company ("GMO") (collectively, "Companies") and to recommend adoption of the alternative rates and structure provided herein, in combination with the alternative definitions recommended in DE witness Ms. Jane E. Epperson's Surrebuttal Testimony.
 - Q. What information did you review in preparing this testimony?
 - A. In preparation for this testimony, I reviewed the proposed rates filed by KCPL.
 - II. PROPOSED SSR METHOLODGY
 - Q. Please explain the approach that you used to resolve the deficiencies described in Ms. Epperson's Rebuttal Testimony¹ regarding the Companies' proposed SSR.
 - A. The solutions to these deficiencies were previously developed in a collaborative effort with Ameren Missouri, which subsequently applied the revised SSR in its territory. I applied these solutions in the KCP&L contexts to produce alternative SSR rates, with modifications to account for KCP&L's generally available rate

¹ Rebuttal testimony, Jane E. Epperson, ER-2018-0145/0146. P 7-8.

designs. DE recommends the adoption of the rates detailed in Tables 1-8, as well as the development of similar rates for GMO.

Q. Why is this method reasonable?

- A. My methodology is linked to the otherwise applicable class rates, distributes charges in a manner that mirrors seasonal costs, and creates a financial incentive for SSR customers to avoid unplanned usage during peak periods and to encourage maintenance to occur during off-peak periods. The same reasoning was used in the collaboration to develop the Ameren SSR and the approach used described in this testimony mirrors the methodology of the Ameren SSR.
- Q. Please explain how the values in Tables 1-8 were derived.
- A. I utilized the methodology to calculate the reservation charge for over 2 MW of standby capacity in the Companies' proposed SSR and reapportioned that charge into the fixed generation and transmission access charge and the summer seasonal facilities charge. I then applied the methodology developed in the SSR workshop to arrive at the remaining SSR rates to achieve a balance between fixed and variable charges. For example, in Table 1:
 - The SSR summer facilities charge (Cell C10 = \$0.530) is one-eighth of the
 Medium General Service ("MGS") summer demand charge (Cell B19 = \$4.243
 divided by eight).
 - The SSR winter facilities charge (Cell C11 = \$0.270) is one-eighth of the MGS winter demand charge (Cell B20 = \$2.159 divided by eight).

- The SSR generation and transmission ("G&T") access charge (Cell C12 = \$0.530) is one-eighth of the MGS summer demand charge (Cell B19 = \$4.243 divided by eight).
- The SSR summer daily back-up demand charge (Cell C16 = \$0.428) is double
 the summer daily maintenance demand charge (Cell C17 = \$0.214).
- The SSR summer daily maintenance demand charge (Cell C17 = \$0.214) is the MGS facilities charge (Cell D9 = \$3.243) plus the MGS summer demand charge (Cell B19 = \$4.243) minus the summer facilities charge (C10 = \$0.530) and the G&T access charge (Cell C12 = \$0.530), with the resulting value divided by 30 (the number of days in a month).
- The SSR winter daily back-up demand charge (Cell C20 = \$0.342) is double the winter daily maintenance charge (Cell C21 = \$0.171).
- The SSR winter daily maintenance demand charge (Cell C21 = \$0.171) is the MGS facilities charge (Cell D9 = \$3.243) plus the MGS winter demand charge (Cell B20 = \$2.159) minus the winter facilities charge (Cell C11 \$0.270) and the G&T access charge (Cell C12 = \$0.530), with the resulting value divided by 30 days.
- The SSR summer back-up energy charge (Cell C24 = \$0.1190) equals the highest summer block rate (Cell B24).
- The SSR winter back-up energy charge (Cell C29 = \$0.09548) equals the highest winter block rate (Cell B29).

- Q. Should the SSR rates shown in Tables 1 8 be adjusted based upon the
 Commission's approved class rates?
 A. Yes. The SSR rates shown in Tables 1 8 are based on the Company's
 - A. Yes. The SSR rates shown in Tables 1 8 are based on the Company's proposed rates filed in this case. All calculated SSR rates will need to be updated to reflect the Commission's Order in the case.
 - Q. What rate schedule should apply to SGS customers generating a portion of their energy requirements?
 - A. The customer should be charged exclusively under the SGS rate schedule.
 - Q. Did you also modify the Ameren Missouri SSR Study Tool to reflect

 KCP&L's Large General Service ("LGS") secondary voltage rate structure?
 - A. Yes, I modified the Ameren Missouri SSR Study Tool for Small Primary Service ("SPS") to reflect KCPL's LGS secondary voltage class. I used the modified tool to study the billing impact of the alternative SSR definitions and structure recommended in the Surrebuttal Testimony of Ms. Epperson and the alternative rates presented in Table 3. The study used the load and generation profiles studied for the Ameren Missouri SPS class during the workshop. The study tool developed during the workshop was later enhanced for use as a customerenabled tool configured for 15-minute interval meter data; I modified this aspect of the tool to reflect the fact that KCP&L's LGS secondary voltage customers are billed based on 30-minute intervals.

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A.

- Is it reasonable, within the timeframe of this rate case, for the Companies Q. 2 to modify the Ameren Missouri SSR Study Tool for the remaining applicable classes, thus producing KCP&L and GMO SSR Study Tools to 3 facilitate customer understanding of the bill impacts of the SSR? 4
 - A. Yes. I've provided a spreadsheet that the Companies can use to model SSR study tools for applicable classes.
 - Q. Please further explain the approach used to modify the Ameren Missouri SSR Study Tool to reflect the companies' rate design structure for LGS secondary voltage customers.
 - The approach comprised multiple steps. I first retrieved calendar year 2014 load and generation hourly data from the Ameren Missouri SPS study file used during the workshop and converted it to equivalent 15-minute data using a converter tool available from Ameren Missouri for that purpose. The 15 minute data was input into the calendar year 2017 Ameren SSR Study Tool template for SPS. The generation profile was modified to reflect the outage schedule used in the workshop. Table 9 summarizes the outage profile. This file serves as a 15minute "baseline file." Next, a copy of the baseline file was modified to reflect 30minute interval meter data per KCP&L's demand billing basis, the addition of monthly facilities charges, the rates in Table 3, and other changes reflective of KCPL's structure, such as invalidation of the high-voltage discount feature of the tool. The results of the 30-minute file were compared to the results of the 15minute file to validate the accuracy of the modification.

ı	ιω.	what were the results of the study for the NOFAL LGS secondary voltage
2		class?
3	A.	The study indicates that the alternative rates achieve an avoided cost percentage
4		of at least 90 percent (92 percent). Table 10 summarizes the results of the 30-
5		minute study file.
6	Q.	Should the Companies adapt the Study Tool to reflect their other classes?
7	A.	Yes. I also recommend that the Companies publish the tool on their website.
8	I II.	RECOMMENDATIONS
9	Q.	What are your recommendations for the Commission?
10	A.	I recommend the Commission direct the companies to:
11		a) Adopt the methodology illustrated in Tables 1-8, in combination with the
12		alternative definitions recommended in Attachment 2 of Ms. Epperson's
13		Surrebuttal Testimony.
14		c) Adopt the draft SSR Study Tool, as modified to reflect KCP&L's rate
15		design for Large General Service, Secondary Voltage.
16		d) Perform similar modification of the draft KCP&L SSR Study Tool to reflect
17		the Companies' other customer service classes applicable to the SSR.
18		Additionally, the Companies should make these tools available on their website.
19	Q.	Does this conclude your testimony?
20	A.	Yes.
21		

Table 1. Medium General Service, Secondary Voltage

	KCP&L Propsosed Rate		DE Proposed KCP&L SSR	
	MGS Secondary Voltage Service		MGS Secondary Voltage	Service
	Α	В	С	D
1	Minimum demand, kW	25	25	Minimum Supplemental Contract Capacity, kW
2			Standby Fixed Charges	
3	Customer charge, \$			
4	0 - 24 kW	\$55.82	\$110.00	Administrative Charge
5	25 - 199 kW	\$55.82		
6	200 - 999 kW	\$113.35		
7	1000 kW or more	\$967.90		
8				
				Facilities Charge per month per kW
9	Facilities Charge, \$/kW*	\$3.243		of Contracted Standby Capacity
10			\$0.530	Summer
11			\$0.270	Winter
				Generation and Transmission Access
				Charge per month per kW of
12			\$0.530	Contracted Standby Capacity
13				
14				
15	Demand Charge, \$/kW		Daily Standby Demand Ra	ate - Summer
16			\$0.428	Back-Up
17			\$0.214	Maintenance
18				
19	Summer	\$4.243	Daily Standby Demand Ra	nte - Winter
20	Winter	\$2.159	\$0.342	Back-Up
21			\$0.171	Maintenance
22				
23	Summer Energy charge, \$/kWh		Back-Up Energy Charges -	Summer
				kWh in excess of Supplemental
24	block 1 - first 180 hours use	\$0.11090	\$0.11090	Contract Capacity
	block 2 - second 180 hours use	\$0.07586		
$\overline{}$	block 3 - over 360 hours use	\$0.06398		
27	1. 1			
28	Winter Energy charge, \$/kWh		Back-Up Energy Charges -	Winter
	3. 3			kWh in excess of Supplemental
29	block 1 - first 180 hours use	\$0.09584	\$0.09584	Contract Capacity
	block 2 - second 180 hours use	\$0.05735		
\vdash	block 3 - over 360 hours use	\$0.04810		

^{*}SSR customers are billed monthly facilities charges calculated as the per kW facilities charge multiplied by the Supplemental Contract Capacity.

Table 2. Medium General Service, Primary Voltage

KCP&L Propsosed Rate		DE Proposed KCP&L SSR		
MGS Primary Voltage Service		MGS Primary Voltage Se	rvice	
A	В	С	D	
1 Minimum demand, kW	25	25	Minimum Supplemental Contract Capacity, kW	
2		Standby Fixed Charges		
3 Customer charge, \$				
4 0 - 24 kW	\$55.82	\$110.00	Administrative Charge	
5 25 - 199 kW	\$55.82			
6 200 - 999 kW	\$113.35			
7 1000 kW or more	\$967.90			
8				
9 Facilities Charge, \$/kW*	\$2.688		Facilities Charge per month per kW of Contracted Standby Capacity	
10		\$0.518	Summer	
11		\$0.263	Winter	
	i	· .	Generation and Transmission Access	
			Charge per month per kW of	
12		\$0.518	Contracted Standby Capacity	
13				
14				
15 Demand Charge, \$/kW		Daily Standby Demand Rate - Summer		
16		\$0.386	Back-Up	
17		\$0.193	Maintenance .	
18				
19 Summer	\$4.144	Daily Standby Demand Ra	ite - Winter	
20 Winter	\$2.107	\$0.302	Back-Up	
21		\$0.151	Maintenance	
22				
23 Summer Energy charge, \$/kWh		Back-Up Energy Charges -	Summer	
			kWh in excess of Supplemental	
24 block 1 - first 180 hours use	\$0.10825	\$0.10825	Contract Capacity	
25 block 2 - second 180 hours use	\$0.07415		-	
26 block 3 - over 360 hours use	\$0.06251			
27				
28 Winter Energy charge, \$/kWh		Back-Up Energy Charges -		
			kWh in excess of Supplemental	
29 block 1 - first 180 hours use	\$0.09358	\$0.09358	Contract Capacity	
30 block 2 - second 180 hours use	\$0.05603			
31 block 3 - over 360 hours use	\$0.04719		•	

^{*}SSR customers are billed monthly facilities charges calculated as the per kW facilities charge multiplied by the Supplemental Contract Capacity.

TABLE 3. Large General Service, Secondary Voltage

	KCP&L Propsosed Rate		DE Proposed KCP&L SSR	
	LGS Secondary Voltage Service		LGS Secondary Voltage S	ervice
	А	В	С	D
1	Minimum demand, kW	200	200	Minimum Supplemental Contract Capacity, kW
2			Standby Fixed Charges	
3	Customer charge, \$			·
4	0 - 24 kW	\$120.11	\$130.00	Administrative Charge
5	25 - 199 kW	\$120.11		
6	200 - 999 kW	\$120.11		
7	1000 kW or more	\$1,025.43		
8				
				Facilities Charge per month per kW
9	Facilities Charge, \$/kW*	\$3.436		of Contracted Standby Capacity
10			\$0.858	Summer
11	-		\$0.462	Winter
				Generation and Transmission Access
				Charge per month per kW of
12			\$0.858	Contracted Standby Capacity
13	,			
14				
15	Demand Charge, \$/kW		Daily Standby Demand Ra	ite - Summer
16	2 2 2		\$0.572	Back-Up
17			\$0.286	Maintenance
18				
19	Summer	\$6.862	Daily Standby Demand Ra	ite - Winter
20	Winter	\$3.692	\$0.444	Back-Up
21			\$0.222	Maintenance
22				
23	Summer Energy charge, \$/kWh		Back-Up Energy Charges - Summer	
				kWh in excess of Supplemental
24	block 1 - first 180 hours use	\$0.10077	\$0.10077	Contract Capacity
25	block 2 - second 180 hours use	\$0.06922		
26	block 3 - over 360 hours use	\$0.04473		
2.7				
28	Winter Energy charge, \$/kWh		Back-Up Energy Charges - Winter	
				kWh in excess of Supplemental
29	block 1 - first 180 hours use	\$0.09259	\$0.09259	Contract Capacity
30	block 2 - second 180 hours use	\$0.05321		
31	block 3 - over 360 hours use	\$0.03759		

^{*}SSR customers are billed monthly facilities charges calculated as the per kW facilities charge multiplied by the Supplemental Contract Capacity.

TABLE 4. Large General Service, Primary Voltage

	KCP&L Propsosed Rate		DE Proposed KCP&LSSR		
	LGS Primary Voltage Service		LGS Primary Voltage Serv	/ice	
	Α	8	С	D	
11	minimum demand, kW	200	200	Minimum Supplemental Contract Capacity, kW	
2			Standby Fixed Charges		
3	Customer charge, \$				
4	0 - 24 kW	\$120.11	\$130.00	Administrative Charge	
5	25 - 199 kW	\$120.11			
6	200 - 999 kW	\$120.11			
7	1000 kW or more	\$1,025.43			
8					
				Facilities Charge per month per kW	
9	Facilities Charge, \$/kW*	\$2.849		of Contracted Standby Capacity	
10			\$0.838	Summer	
11			\$0.451	Winter	
				Generation and Transmission Access	
				Charge per month per kW of	
12			\$0.838	Contracted Standby Capacity	
13					
14					
15	Demand Charge, \$/kW		Daily Standby Demand Rate - Summer		
16			\$0.525	Back-Up	
17			\$0.263	Maintenance	
18					
19	Summer	\$6.706	Daily Standby Demand Ra	ate - Winter	
20	Winter	\$3.608	\$0.400	Back-Up	
21			\$0.200	Maintenance	
22					
23	Summer Energy charge, \$/kWh		Back-Up Energy Charges -	Summer	
				kWh in excess of Supplemental	
24	block 1 - first 180 hours use	\$0.09851	\$0.09851	Contract Capacity	
25	block 2 - second 180 hours use	\$0.06757			
26	block 3 - over 360 hours use	\$0.04368			
27					
28	Winter Energy charge, \$/kWh		Back-Up Energy Charges -	Winter	
				kWh in excess of Supplemental	
29	block 1 - first 180 hours use	\$0.09048	\$0.09048	Contract Capacity	
		 	1	· · · · · · · · · · · · · · · · · · ·	
	block 2 - second 180 hours use	\$0.05194			

^{*}SSR customers are billed monthly facilities charges calculated as the per kW facilities charge multiplied by the Supplemental Contract Capacity.

1 TABLE 5. Large Primary Service, Secondary Voltage

	KCP&L Propsosed Rate		DE Proposed KCP&LSSR	
	LPS Secondary Voltage Service		LPS Secondary Voltage So	ervice
	A	В	С	D
				Minimum Supplemental Contract
1	Minimum demand, kW	1000	1000	Capacity, kW
2			Standby Fixed Charges	
3	Customer charge, \$	\$1,160.53		
4	·		\$430.00	Administrative Charge
5				
				Facilities Charge per month per kW
6	Facilities Charge, \$/kW*	\$3.887		of Contracted Standby Capacity
7			\$0.922	Summer
8			\$0.679	Winter
				Generation and Transmission Access
				Charge per month per kW of
9	Summer Demand Charge, \$/kW		\$0.922	Contracted Standby Capacity
10	block 1 - first 2443 kW	\$15.079		, , ,
11	block 2 - next 2443 kW	\$12.061		
12	block 3 - next 2443 kW	\$10.104		
13	block 4 - all over 7329 kW	\$7.376	Daily Standby Demand Rate - Summer	
14			\$0.628	Back-Up
15	Winter Demand Charge, \$/kW		\$0.314	Maintenance
-	block 1 - first 2443 kW	\$10.250		
17	block 2 - next 2443 kW	\$7.998	Daily Standby Demand Ra	ite - Winter
18	block 3 - next 2443 kW	\$7.056	\$0.576	Back-Up
19	block 4 - all over 7329 kW	\$5.432	\$0.288	Maintenance
20				
21	Summer Energy charge, \$/kWh		Back-Up Energy Charges -	Summer
			<u> </u>	kWh in excess of Supplemental
22	block 1 - first 180 hours use	\$0.09442	\$0.09442	Contract Capacity
	block 2 - second 180 hours use	\$0.05612		, ,
_	block 3 - over 360 hours use	\$0.02693		
25				
	Winter Energy charge, \$/kWh		Back-Up Energy Charges	Winter
	77.7			kWh in excess of Supplemental
27	block 1 - first 180 hours use	\$0.08004	\$0.08004	Contract Capacity
	block 2 - second 180 hours use	\$0.05105		
<u> </u>	block 3 - over 360 hours use	\$0.02666		

^{*}SSR customers are billed monthly facilities charges calculated as the per kW facilities charge multiplied by the Supplemental Contract Capacity.

TABLE 6. Large Primary Service, Primary Voltage

	KCP&L Propsosed Rate		DE Proposed KCP&L SSR		
	LPS Primary Voltage Service		LPS Primary Voltage Ser	vice	
	Α	В	С	D	
				Minimum Supplemental Contract	
1	Minimum demand, kW	1000	1000	Capacity, kW	
2			Standby Fixed Charges		
3	Customer charge, \$	\$1,160.53			
4			\$430.00	Administrative Charge	
5		1			
				Facilities Charge per month per kW	
6	Facilities Charge, \$/kW*	\$3.221		of Contracted Standby Capacity	
7	•		\$0.901	Summer	
8			\$0.664	Winter	
				Generation and Transmission Access	
				Charge per month per kW of	
9	Summer Demand Charge, \$/kW		\$0.901	Contracted Standby Capacity	
10	block 1 - first 2500 kW	\$14.732	1788		
11	block 2 - next 2500 kW	\$11.787		***	
12	block 3 - next 2500 kW	\$9.872			
13	block 4 - all over 7500 kW	\$7.208	Daily Standby Demand Rate - Summer		
14			\$0,575	Back-Up	
15	Winter Demand Charge, \$/kW		\$0.288	Maintenance	
16	block 1 - first 2500 kW	\$10.012			
17	block 2 - next 2500 kW	\$7.816	Daily Standby Demand R	ate - Winter	
18	block 3 - next 2500 kW	\$6.894	\$0.524	Back-Up	
19	block 4 - all over 7500 kW	\$5.309	\$0.262	Maintenance	
20					
21	Summer Energy charge, \$/kWh		Back-Up Energy Charges	- Summer	
				kWh in excess of Supplemental	
22	block 1 - first 180 hours use	\$0.09226	\$0.09226	Contract Capacity	
23	block 2 - second 180 hours use	\$0.05485			
24	block 3 - over 360 hours use	\$0.02630			
25					
26	Winter Energy charge, \$/kWh		Back-Up Energy Charges	- Winter	
				kWh in excess of Supplemental	
27	block 1 - first 180 hours use	\$0.07821	\$0.07821	Contract Capacity	
28	block 2 - second 180 hours use	\$0.04987			
29	block 3 - over 360 hours use	\$0.02605		1//2005-14-	

^{*}SSR customers are billed monthly facilities charges calculated as the per kW facilities charge multiplied by the Supplemental Contract Capacity.

Surrebuttal Testimony of Barbara J. Meyer Case Nos. ER-2018-0145 and ER-2018-0146

1 TABLE 7. Large Primary Service, Substation Voltage

	KCP&L Propsosed Rate		DE Proposed KCP&L SSR	·	
<u> </u>	LPS Substation Voltage Service		LPS Substation Voltage S	ervice	
	A	В	С	D .	
				Minimum Supplemental Contract	
1	Minimum demand, kW	1000	1000	Capacity, kW	
2			Standby Fixed Charges		
3	Customer charge, \$	\$1,160.53			
40			\$430.00	Administrative Charge	
5					
				Facilities Charge per month per kW	
6	Facilities Charge, \$/kW*	\$0.972		of Contracted Standby Capacity	
7			\$0.890	Summer	
8			\$0.656	Winter	
				Generation and Transmission Access	
9				Charge per month per kW of	
	Summer Demand Charge, \$/kW		\$0.890	Contracted Standby Capacity	
10	block 1 - first 2530 kW	\$14.570			
11	block 2 - next 2530 kW	\$11.645			
12	block 3 - next 2530 kW	\$9.755			
13	block 4 - all over 7590 kW	\$7.123	Daily Standby Demand Rate - Summer		
14			\$0.421	Back-Up	
15	Winter Demand Charge, \$/kW		\$0.210	Maintenance	
16	block 1 - first 2530 kW	\$9.896			
17	block 2 - next 2530 kW	\$7.724	Daily Standby Demand Ra		
18	block 3 - next 2530 kW	\$6.814	\$0.371	Back-Up	
19	block 4 - all over 7590 kW	\$5.246	\$0.185	Maintenance	
20					
21	Summer Energy charge, \$/kWh		Back-Up Energy Charges -		
22				kWh in excess of Supplemental	
	block 1 - first 180 hours use	\$0.09118	\$0.09118	Contract Capacity	
23	block 2 - second 180 hours use	\$0.05421			
	block 3 - over 360 hours use	\$0.02598			
25			10000000000000000000000000000000000000		
26	Winter Energy charge, \$/kWh		Back-Up Energy Charges -		
27				kWh in excess of Supplemental	
	block 1 - first 180 hours use	\$0.07731	\$0.07731	Contract Capacity	
—	block 2 - second 180 hours use	\$0.04928			
29	block 3 - over 360 hours use	\$0.02574			

^{*}SSR customers are billed monthly facilities charges calculated as the per kW facilities charge multiplied by the Supplemental Contract Capacity.

TABLE 8. Large Primary Service, Transmission Voltage

-	CP&L Propsosed Rate		DE Proposed KCP&L SSR		
LI	PS Transmission Voltage Service		LPS Transmission Voltage	Service	
	Α	В	С	D	
				Minimum Supplemental Contract	
1 N	inimum demand, kW	1000	1000	Capacity, kW	
2			Standby Fixed Charges		
3 C	ustomer charge, \$	\$1,160.53			
: 4			\$430.00	Administrative Charge	
5					
				Facilities Charge per month per kW	
6 Fa	acilities Charge, \$/kW*	\$0.000		of Contracted Standby Capacity	
7			\$0.882	Summer	
8			\$0.650	Winter	
				Generation and Transmission Access	
				Charge per month per kW of	
9 S u	ummer Demand Charge, \$/kW		\$0.882	Contracted Standby Capacity	
10 bl	lock 1 - first 2553 kW	\$14.431			
11 bl	lock 2 - next 2553 kW	\$11.541			
12 bl	lock 3 - next 2553 kW	\$9.666			
13 bl	lock 4 - all over 7659 kW	\$7.059	Daily Standby Demand Ra	ite - Summer	
14			\$0.353	Back-Up	
15 W	/inter Demand Charge, \$/kW		\$0.176	Maintenance	
16 bl	lock 1 - first 2553 kW	\$9.807			
17 bi	lock 2 - next 2553 kW	\$7.655	Daily Standby Demand Ra	nte - Winter	
18 bl	lock 3 - next 2553 kW	\$6.754	\$0.303	Back-Up	
19 bl	lock 4 - all over 7659 kW	\$5.199	\$0.152	Maintenance	
20					
21 St	ummer Energy charge, \$/kWh		Back-Up Energy Charges -	Summer	
				kWh in excess of Supplemental	
22 bl	ock 1 - first 180 hours use	\$0.09037	\$0.09037	Contract Capacity	
23 bl	ock 2 - second 180 hours use	\$0.05371			
24 bl	ock 3 - over 360 hours use	\$0.02576			
25					
26 W	/inter Energy charge, \$/kWh		Back-Up Energy Charges -	Winter	
				kWh in excess of Supplemental	
27 bl	ock 1 - first 180 hours use	\$0.07660	\$0.07660	Contract Capacity	
28 bl	ock 2 - second 180 hours use	\$0.04885			
29 bl	ock 3 - over 360 hours use	\$0.02550			

^{*}SSR customers are billed monthly facilities charges calculated as the per kW facilities charge multiplied by the Supplemental Contract Capacity.

Surrebuttal Testimony of Barbara J. Meyer Case Nos. ER-2018-0145 and ER-2018-0146

TABLE 9. Outage schedule used for KCP&L SSR Study Tool.

OUTAGE SU	IN AN AA DV		P
OUTAGE SU	IVIIVIARY		•
Month	Outage Description	Maintenance hrs	FO hrs
lanuair	FO- Fri 20th hr 1 through Sat 21st hr 18 (42 hrs		
January	total)		42
February	FO- Mon 17th hr 1 through hr 24 (24 hrs total)		24
March	FO- Fri 31st hr 4 through hr 10 (7 hrs total)		7
	FO -Thurs 6th hr 12 through hr 14 (3 hrs total);		
April	FO - Thurs 27th hr 3 through hr 5 (3 hrs total)		6
<u> </u>	FO -Fri 2nd hr 12 through hr 14 (3 hrs total);		
May	FO - Sat 27th hr 3 through hr 5 (3 hrs total)		6
	FO - Fri 23rd hr 1 through Sat 24th hr 18 (42 hrs		
June	total)	,	42
July	Scheduled - Thurs 20th hr 1 through hr 22	22	
	FO -Thurs 31st hr 11 through hr 17 (7 hrs		
	total); FO - Sun 6th hr 12 through hr 14 (3 hrs		
August	total)		10
September	FO -Wed 27th hr 3 through hr 5 (3 hrs total)		3
October	FO. Tures 21st by 11 th yearsh by 47 /7 by 4 4 4 1)		
October	FO -Tues 31st hr 11 through hr 17 (7 hrs total)		7
November	Scheduled - Tues 21st hr 11 through 28th hr 10 (168 hrs total)	168	
December	FO -Fri 15th hr 3 through hr 5 (3 hrs total)		3
		190	150
		2.17%	1.71%

Surrebuttal Testimony of Barbara J. Meyer Case Nos. ER-2018-0145 and ER-2018-0146

TABLE 10. Study results for alternative rate proposal for KCP&L LGS Secondary 2

Voltage.

	Full Service Requirement		Supplemental + SSR		-	Generated	Avoided Cost
	kWh	Bill	kWh	Bill	Avoided Cost	kWh	Percentage*
January	2,005,478.11	148,183.38	1,100,503.34	88,733.85	59,449.54	904,974.77	0.889058702
February	1,853,657.89	141,168.85	1,018,530.89	83,678.50	57,490.34	835,127.00	0,903926431
March	1,946,291.17	144,281.96	1,087,999.52	84,139.03	60,142.93	858,291.65	0.945247314
April	1,881,793.37	142,516.61	1,054,846.98	83,286.68	59,229.93	826,946.39	0.945736801
May	2,024,024.05	154,598.27	1,144,593.77	90,124.33	64,473.94	879,430.28	0.959828927
June	2,094,030.51	193,140.09	1,257,721.64	123,135.86	70,004.23	836,308.87	0.907545028
July	2,189,453.50	198,976.73	1,332,703.04	122,787.02	76,189.70	856,750.46	0.978532795
August	2,239,081.96	204,452.48	1,323,608.66	129,009.84	75,442.64	915,473.30	0.902503266
September	2,074,302.08	195,491.03	1,227,506.84	116,981.63	78,509.39	846,795.25	0.983758227
October	1,970,437.56	147,502.86	1,112,356.27	86,454.20	61,048.66	858,081.30	0.950407647
November	1,839,658.22	138,542.04	1,110,860.13	94,710.59	43,831.46	728,798.09	0.79860909
December	1,877,201.47	139,049.07	943,367.99	74,576.43	64,472.64	933,833.48	0.932070615
Annual	23,995,409.90	1,947,903.36	13,714,599.05	1,177,617.97	770,285.40	10,280,810.85	0.922964637