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Witness: Jane E. Epperson
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Case Nos.: ER-2018-0145
ER-2018-0146

MISSOURI PUBLIC SERVICE COMMISSION

KANSAS CITY POWER & LIGHT COMPANY

AND

KCP&L GREATER MISSOURI OPERATIONS COMPANY

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

REBUTTAL TESTIMONY

OF

JANE E. EPPERSON

ON

BEHALF OF

MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT

DVISION OF ENERGY

Jefferson City, Missouri

August 7, 2018

(Rate Design)

Mo. Div. Energy Exhibit No. 455
Date 10/3/18 JEB
File No. ER-2018-0145
ER-2018-0146

Exhibit # 455

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In The Matter of Kansas City Power & Light)
Companies' Request for Authority to Implement) Case No. ER-2018-0145
a General Rate Increase for Electric Service)


In The Matter of KCP&L Greater Missouri)
Operations Company's Request for Authority to) Case No. ER-2018-0146
Implement a General Rate Increase for)
Electric Service)

AFFIDAVIT OF JANE E. EPPERSON

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Jane E. Epperson, of lawful age, being duly sworn on her oath, deposes and states:

1. My name is Jane E. Epperson. I work in the City of Jefferson, Missouri, and I am employed by the Missouri Department of Economic Development, Division of Energy as an Energy Policy Analyst.
2. Attached hereto and made a part hereof for all purposes is my Rebuttal 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.


Jane E. Epperson

Subscribed and sworn to before me this 7th day of August, 2018.

My commission expires: 4/26/20


Notary Public

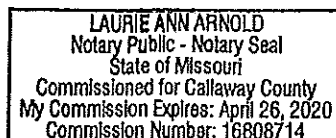


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1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q. Please state your name and business address.**

3 A. My name is Jane E. Epperson. 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?**

6 A. I am employed by the Missouri Department of Economic Development ("DED"),
7 Division of Energy ("DE") as an Energy Policy Analyst.

8 **Q. Have you previously filed testimony before the Missouri Public Service
9 Commission ("Commission") in this case?**

10 A. Yes. I filed direct rate design testimony to a) clarify the obligation for utilities to
11 provide cost-based standby service to customers who choose to self-generate a
12 portion of their energy requirement, b) describe combined heat and power ("CHP")
13 technology and associated energy efficiency and resiliency benefits, c) summarize
14 results of the collaborative workshop to develop a standby service rider in the
15 Ameren Missouri Case No. ER-2014-0258, and d) provide components and
16 characteristics of a standby service rider that is not discriminatory.

17 **Q. What is the purpose of your rebuttal rate design testimony?**

18 A. The purpose of my rebuttal testimony is to address both Kansas City Power & Light's
19 ("KCPL") and Greater Missouri Operations Company's ("GMO") proposed standby
20 service riders, which are the same. For simplicity, I will refer to both companies
21 standby service riders in the singular ("SSR"). While examples and illustrations
22 were developed using KCPL's proposed generally available rate schedules, the
23 issues and recommendations contained within this testimony apply to both KCPL

1 and GMO. For simplicity, I will refer to the "Companies" throughout this testimony.
2 My rebuttal testimony a) provides a list of deficiencies associated with the
3 Companies' proposed SSR, b) compares it to the Ameren Missouri SSR, and c)
4 provides specific recommendations for revising the Companies' proposed SSR in
5 this rate proceeding.

6 **Q. What information did you review in preparing this testimony?**

7 A. In preparation of this testimony I reviewed the Bonbright Principles of Public Utility
8 Rates;¹ direct testimony filed by the Companies' Bradley D. Lutz regarding the
9 proposed standby service rider; Ameren Missouri's standby service rider; and the
10 Companies' responses to DED-DE Data Request Numbers 300-312 in this case.

11 **Q. Please provide a summary of your recommendations for the present cases.**

12 A. Equitable and cost-based standby service is imperative to enable
13 combined heat and power ("CHP") implementation. CHP enables customers
14 to maximize energy efficiency and enhance resiliency (for themselves and the grid)
15 by controlling a portion of their energy generation. Please refer to my direct
16 testimony in the current Case Nos. ER-2018-0145 and ER-2018-0146 for
17 additional information regarding the benefits of CHP. I recommend the
18 Commission order KCPL and GMO to do the following with regard to the
19 development of cost-based, equitable standby service:

20 1. Adopt the following collaboratively developed definitions found in the Ameren
21 Missouri SSR (Schedule 1): supplementary contract capacity, on/off peak hours,

¹ Bonbright, James, C., 1961. Principles of Public Utility Rates, Columbia University Press, New York.

1 supplemental service, standby service, backup service, maintenance service,
2 standby contract capacity, supplemental demand, standby service demand, and
3 total billing demand.

4 2. Define the capacity reservation charge as an as-used charge that reflects the
5 high availability and low forced outage rates associated with CHP systems.

6 3. Replace the minimum operating limit definition with supplemental contract
7 capacity, defined as 90 % of the historic or probable loads of the facility minus the
8 standby contract capacity; and order that standby daily demand and associated
9 energy charges apply only when customer load exceeds the supplemental contract
10 capacity during on-peak periods.

11 4. Adopt the collaboratively developed tariff structure that provides transparency
12 regarding fixed charges (administrative, generation and transmission access and
13 seasonal facilities charges); seasonal daily demand charges for backup and
14 maintenance service; and seasonal energy charges.

15 5. Eliminate the interconnection charge and the 2 MW/10 MW delineation from the
16 proposed SSR.

17 6. Ensure that scheduled maintenance can occur a) during off-peak periods
18 without incurring maintenance service charges, and b) during on-peak periods
19 without incurring maintenance service charges provided that the resulting
20 customer load remains below the defined supplemental contract capacity.

21 7. Ensure that the energy charge applicable to maintenance or backup service
22 does not exceed the seasonal energy charge of the first block of the generally

1 available rate schedule and only applies to energy usage during on-peak periods
2 when the customer load exceeds the supplemental contract capacity.

3 8. Develop a tool to facilitate customer understanding of the bill impact given
4 various usage and generation scenarios the customer may desire to evaluate.

5 Duplicate the steps taken by Ameren Missouri in producing their study tool²,
6 including:

- 7 • Develop annual load profiles based upon average customer class
8 data for each of the applicable customer classes and voltage service
9 levels to use in the billing tool.
- 10 • Create a customer generation profile reflecting the approach used in
11 the Ameren Missouri SSR development.
- 12 • Develop an annual billing tool to analyze the combined billing impact
13 of SSR and supplemental charges with and without customer
14 generation.
- 15 • Balance the combination of fixed and as-used charges to achieve
16 avoided cost percentages for each of the classes greater than 90%.
- 17 • Modify the annual billing tool for each class to create a customer-
18 usable tool, to reflect the Companies' rate structure, and make it
19 available on the Companies' website.

20 9. Conduct a class cost-of-service study so that non-discriminatory rates can be
21 applied to this distinct class of customer.

² <https://www.ameren.com/missouri/business/rates/electric-rates/rider-ssr>

1 **II. LIST OF DEFICIENCIES WITH THE COMPANIES' PROPOSED STANDBY**
2 **SERVICE RIDER**

3 **Q. What is a standby service rider and what is its impact to self-generation and**
4 **energy efficiency?**

5 A. According to the American Council for Energy-Efficient Economy (ACEEE)
6 standby service riders or rates are "charges levied by utilities when a distributed
7 generation system, such as an on-site CHP system, experiences a scheduled or
8 emergency outage, and then must rely on power purchased from the grid. These
9 charges are generally composed of two elements: energy charges, in \$/kWh,
10 which reflect the actual energy provided to the CHP system; and demand charges,
11 in \$/kW, which attempt to recover the costs to the utility of providing capacity to
12 meet the peak demand of the facility using the CHP system³." Standby service
13 rates that are inflated can serve as a strong deterrent against self-
14 generation. Just and reasonable treatment of customers who choose to self-
15 generate a portion of their energy requirement is specifically supported at both the
16 federal (Public Utility Regulatory Policies Act⁴) and state (Missouri Public Service
17 Commission rules⁵) levels.

18 **Q. Please list and briefly explain the deficiencies DE has identified in the**
19 **Companies' proposed standby service rider.**

20 A. The following list of deficiencies is not reflective of priority:

³ <http://aceee.org/topics/standby-rates>

⁴ 18 C.F.R. 292.203b, 292.205

⁵ 4 CSR 240-20.060(5)(A)

1 1. The Companies' proposed SSR discriminates within and between eligible
2 customer classes through the creation of an intermediate (2 MW) and upper limit
3 (10 MW) standby contract capacity, which establishes different rates based on
4 customer size and potential generation capacity.

5 2. The rate values in the Companies' proposed SSR are not based on factual
6 information, studies, or models that reflect the unique cost of providing standby
7 service to customers that are generating a portion of their own energy
8 requirement. Standby rates are necessary to recover the fully allocated
9 embedded costs that the utility incurs to provide backup and maintenance
10 service--no more and no less.

11 3. The structure of the proposed SSR indicates that duplicative demand-related
12 charges for standby and supplemental service are probable and likely.

13 4. The Companies' proposed SSR bases charges for a primary service customer
14 on higher secondary service charges. This rate treatment is punitive.

15 5. The Companies' proposed SSR bases charges on the higher-rate summer
16 season charges of the generally available rate schedule and applies them year
17 round. This rate treatment is punitive.

18 6. The Companies' proposed SSR defines standby and maintenance service
19 based upon the season instead of upon predictability and system load at the time
20 of occurrence (on/off peak). The SSR should incorporate off-peak demand
21 provisions consistent with the LPS-1 rate schedule (Schedule 3) and permit
22 scheduling of maintenance activities at times of low system load (off-peak) during
23 any month.

1 7. The Companies' proposed SSR is most discriminatory to the Small General
2 Service ("SGS") class, for whom they would levy either an interconnection charge
3 (< 2 MW) or a daily demand charge (> 2 MW) when the SGS customer is not
4 subject to any demand charge (summer or winter) otherwise, and may not be
5 subject to a facilities charge (under 25 kW). This rate treatment is punitive.

6 8. The Companies' proposed SSR requires an additional meter (> 2 MW),
7 creating unnecessary complexity and costs associated with supporting two
8 meters.

9 9. The Companies' proposed SSR requires a minimum operating limit (90% of
10 standby contract capacity) for larger systems (> 2 MW) that reflects a lack of
11 understanding of normal CHP system operation and would penalize customers
12 for accessing the benefits for which they installed the CHP system.

13 10. The Companies' proposed SSR excludes energy storage systems from
14 eligibility. While not necessarily a concern for CHP customers, energy storage
15 should not be excluded from use by customers who choose to incorporate other
16 forms of distributed generation, such as solar photovoltaic systems.

17 11. The Companies' proposed SSR is unnecessarily complex and lacks
18 transparency. The essential elements of clear definitions, reliability to the
19 generally available rate schedules, billing equations, and examples are absent.

20 **Q. Can the list of deficiencies you have identified and raised with the**
21 **Companies' proposed SSR be resolved within the context of this rate case?**

1 A. Yes. Solutions to these deficiencies have previously been developed and applied
2 by another regulated electric company. These solutions can be utilized, with
3 reasonable modification, and applied to the Companies regulated customers.

4 **III. AMEREN MISSOURI STANDBY SERVICE RIDER--LESSONS LEARNED**

5 **Q. What was the origin of the Ameren Missouri SSR collaborative workshop**
6 **effort?**

7 A. On March 5, 2015, Union Electric Company d/b/a Ameren Missouri, the Missouri
8 Department of Economic Development – Division of Energy, the Missouri
9 Industrial Energy Consumers (MIEC), and the Staff of the Commission filed a
10 non-unanimous stipulation and agreement that would resolve all issues relating
11 to supplemental service in Case No. ER-2014-0258. As part of the agreement,
12 Ameren Missouri was directed to consult with interested stakeholders to draft and
13 file a Standby Tariff by December 31, 2015 that would apply prospectively to all
14 new customer generators. Ameren Missouri led what is referred to herein as the
15 Ameren Missouri SSR collaborative workshop effort. The collaborative members
16 worked on the draft SSR for over a year, resulting in agreement on the definitions
17 and overall structure of this important tariff.

18 **Q. Did KCPL participate in the Ameren Missouri SSR collaborative workshop**
19 **effort?**

20 A. Yes. KCPL not only participated in the Ameren SSR collaborative workshop but
21 referenced the Ameren Missouri SSR in their Standby Tariff Review⁶.

⁶Kansas City Power and Light, 2017. Standby Tariff Review. Response to ER-2014-0370.

1 **Q. What “lessons learned” through the Ameren Missouri SSR collaborative**
2 **workshop effort should be applied to the Companies’ proposed SSR?**

3 **A.** The following are foundational tenets of an appropriate SSR:

4 1. Agreement on definitions of the following terms: supplemental contract capacity,
5 on/off peak hours, supplemental service, standby service, backup service,
6 maintenance service, standby contract capacity, supplemental demand, standby
7 service demand, and total billing demand.

8 2. Agreement on a tariff structure with charges relatable to, and based upon,
9 each generally available rate schedule, providing transparency regarding fixed
10 charges (administrative, generation and transmission access and seasonal
11 facilities charges); seasonal daily demand charges for backup and maintenance
12 service; and seasonal energy charges for backup service on and off peak.

13 3. Through the definition of the supplemental contract capacity, enabled the
14 customer to optimize the size, configuration and operation of the CHP system for
15 their own requirements without undue limitation, providing access to the benefits
16 the system was intended and designed to deliver.

17 4. Absence or elimination of intermediate or upper limits of customer generation.

18 5. Absence or elimination of a second meter.

19 6. Agreement on the need to develop a study tool by which customers can
20 estimate the impact of the SSR on their bill, providing both an appropriate level of
21 transparency and a uniform method and metric for continued analysis of the SSR.

1 The study tool is also useful to the customer to assist in designing an optimal CHP
2 system to serve their particular facility.

3 7. Use of avoided cost percentage ("ACP") as a metric for determining rate
4 values. An ACP of 90% or more for each customer class is achievable provided
5 that the standby rate structure contains a reasonable balance between fixed and
6 variable charges, and the customer is provided with the opportunity to
7 schedule and use maintenance service without incurring excessive charges.

8 **Q. Is it possible for the Companies, within the timeframe of this rate case, to**
9 **develop a SSR study tool similar to the Ameren Missouri SSR study tool⁷?**

10 **A.** Yes, the Companies can modify the Ameren study tool to reflect their rate
11 structures and make the tool available on the Companies⁷ website to facilitate
12 customer understanding of the bill impact of the SSR given various usage and
13 generation capacities.

14 **IV. DETAIL OF DEFICIENCIES WITH THE COMPANIES' PROPOSED**
15 **STANDBY SERVICE RIDER**

16 **Q. Can you provide an overview comparison of the Ameren Missouri SSR and**
17 **the Companies' proposed SSR?**

18 **A.** Yes. Table 1 provides an overview comparison of the two SSRs comprising
19 eighteen important elements. With the exception of Item 3 (minimum
20 generation capacity) the two approaches to SSR structure are very different.
21 Despite the Companies' participation in the collaboratively developed definitions

⁷ <https://www.ameren.com/missouri/business/rates/electric-rates/rider-ssr>

1 and structure of the Ameren Missouri SSR, KCPL chose not to include either in
2 the Companies' proposed SSR, resulting in unnecessary complexity,
3 opaqueness, and discriminatory treatment.

1 TABLE 1. Overview Comparison of the Companies' Proposed SSR and Ameren Missouri's SSR

GA = Generally Applicable

No.	Item Description	KCP&L	Ameren Missouri
1	Number of Applicable Customer Classes	Four	Three
2	Number of Generally Applicable Tariffs	Ten	Three
3	Minimum Generation Capacity	100 kW	100 kW
4	Intermediate Customer Generation Capacity	2 MW of contracted standby capacity	None
5	Maximum Customer Generation Capacity	10 MW of contracted standby capacity	None
6	Off-Peak Demand Provisions	No	Yes
7	Threshold - Supplemental to Standby	2 MW or less - none, all supplemental; above 2 MW - 90% of generator nameplate rating	Seasonal Supplemental Contract Capacity (SCC) calculated as 90% of seasonal peak less seasonal generator rated capacity
8	Maintenance Service	All standby taken in winter months	Scheduled standby taken with permission - all year
9	Backup Service	All standby taken in summer months	Unscheduled standby taken without permission - all year
10	Fixed Monthly Reservation Charges	Capacity reservation calculated from secondary service facilities charge; interconnection charge (2 MW or less only) calculated from secondary service summer demand rate	Generation and transmission (G&T) charges; seasonal facilities charge; sum of G&T and facilities charges is less than seasonal demand rate of GA tariff
11	Daily Maintenance Demand Charges	2 MW or less - not applicable; above 2 MW - calculated from secondary service summer demand rate	Apply only if demand resulting from generator outage exceeds supplemental contract capacity; sum of fixed reservation charges and 30 days of daily demand charges equates to GA demand seasonal rate
12	Daily Backup Demand Charges	2 MW or less - not applicable; above 2 MW - calculated from secondary service summer demand rate	Apply only if demand resulting from generator outage exceeds supplemental contract capacity; daily backup rate is twice the maintenance rate
13	Maintenance Energy Charges	2 MW or less - not applicable; above 2 MW - equal to secondary service summer middle block rate	Apply only if demand resulting from generator outage exceeds supplemental contract capacity; equal to highest seasonal energy block rate
14	Backup Energy Charges	2 MW or less - not applicable; above 2 MW - equal to secondary service summer first (highest) block rate	Apply only if demand resulting from generator outage exceeds supplemental contract capacity; equal to highest seasonal energy block rate
15	Battery Storage Applicability	Prohibited	Allowed; Required if generation source is intermittent (solar/wind)
16	Multiple Generating Units Adjustment	No reduction in fixed charges for multiple units	Largest unit pays full fixed charges, 25% reduction in fixed charges on additional units
17	Number of Meters Required	2 MW or less - one; above 2 MW - two	One
18	Transparency, Simplicity	Supplemental/standby threshold unclear; two sets of SSR rates - above/below 2 MW generating threshold; multiple sets of GA tariffs per class (2-4 voltages levels each); SSR rates do not correlate to GA seasonal rates, no billing study tool available.	Clear definitions, one set of SSR rates per class/GAtariff, rates directly correlate to GA seasonal rates, SSR billing study tool available to customer

1 **Q. How does the Companies' proposed SSR measure up to the Bonbright**
2 **principle of simplicity, understandability, public acceptability, and**
3 **feasibility of application⁸?**

4 A. Inadequately. Bonbright's Principles of Public Utility Rates help regulators
5 measure whether a utility's proposed rates are in the public interest by identifying
6 a number of important public interest concepts to be considered when setting
7 rates. The Companies' proposed SSR fails to satisfy Bonbright's principles
8 because the proposal is complex, unnecessarily unclear, incomplete and includes
9 elevated costs to the degree that they would serve as a deterrent to a customer
10 considering CHP for their business.

11 **Q. Please explain how the Companies' proposed SSR is deficient.**

12 A. The proposed SSR introduces complexity by creating two categories of
13 generation, essentially small and large categories, and associated charges. The
14 proposed SSR lack clarity and transparency in that the rate elements do not
15 distinguish between generation, transmission, and distribution, and do not reflect
16 voltage or seasonal differences evident in the generally available rates schedules.
17 The proposed SSR is incomplete in that some definitions and the billing
18 calculation formula are absent. The Companies have proposed no reasonable
19 means by which a customer can estimate the billing impact of the SSR in
20 combination with billing under the generally available rate schedule. The fact that
21 the associated rate schedules include facilities demand ratchets (monthly charge

⁸ Bonbright, James, C., 1961. Principles of Public Utility Rates, Columbia University Press, New York.

1 calculated upon the highest monthly demand in the year) and declining block
2 rates creates further complexity for customers attempting to
3 determine the bill impact of implementing a CHP system.

4 **Q. Please provide an example of a definition that is absent in the SSR.**

5 A. The definition of demand charge (based on the highest demand, measured in
6 kilowatts that a customer places on the utility grid for the billing period and is
7 subject to a minimum charge) is absent from the proposed SSR as well as the
8 generally available rate schedules. One must seek out the definition (Schedule2)
9 on the Companies' website.⁹ The demand charge has a significant impact on a
10 customer's bill and should be included in any SSR.

11 **Q. How does the Companies' proposed SSR measure up to the Bonbright
12 principle of avoidance of undue discrimination in rate relationships?**

13 A. Inadequately. Missouri regulation is clear regarding the avoidance of undue
14 discrimination in rate relationships for customers with a qualifying
15 facility (CHP is one type of qualifying facility):

16 "...Rates for sales shall be just and reasonable and in the public interest
17 and shall not discriminate against any qualifying facility in comparison to
18 rates for sales to other customers served by the electric utility. Rates for
19 sales which are based on accurate data and consistent system-wide costing
20 principles shall not be considered to discriminate against any qualifying

⁹ <https://www.kcpl.com/my-account/understanding-my-bill/your-missouri-business-bill>

1 facility to the extent that those rates apply to the utility's other customers
2 with similar load or other cost-related characteristics"¹⁰.

3 **Q. What data or studies have the Companies performed that quantify the**
4 **difference in cost of providing service to a CHP customer and a non-CHP**
5 **customer with similar load and cost-related characteristics?**

6 **A.** None. In response to Data Request DED-300, the Companies indicated that no
7 data, studies, or work papers exist in support of the calculations contained within
8 the proposed SSR. Furthermore, no additional analysis of CHP or of the rates
9 proposed is planned.

10 **Q. Are the rates in the Companies' proposed SSR based on any unique or**
11 **customer-specific information?**

12 **A.** No. To be clear, the rates in the Companies' proposed SSR are not based on any
13 information that reflects the unique costs of providing standby service to customers
14 that choose to generate a portion of their own energy requirement.

15 **Q. Without utilizing any cost-of-service related CHP customer data, models, or**
16 **studies, on what do the Companies base their proposed SSR charges?**

17 **A.** In response to Data Requests DED-300 and DED-311, the Companies indicated
18 that the rates proposed in the SSR are derived from the generally available rate
19 schedules for SGS, Medium General Service ("MGS"), Large General Service
20 ("LGS") and Large Primary Service ("LPS") classes (GMO does not have MGS
21 class).

¹⁰ 4 CSR 240-20.060(5)(A)

1 **Q. What does a customer need to do to understand the charges that would be**
2 **applicable to their business should they consider or pursue a CHP system?**

3 A. Holding the SSR and the generally available rate schedule in hand may be all that
4 is necessary to discourage a customer from considering CHP. Analyzing the
5 potential bill impact would indeed be a daunting task. The cost of a consultant to
6 analyze the impact for the customer creates discriminatory cost barrier upfront
7 in the development process. A consultant, or the customer if time and ability
8 permitted, might produce something similar to Tables 2 through 5. Tables 2
9 through 5 provide a side by side accounting of the charges found in the proposed
10 SSR and the generally available rate schedules: LPS (Tables 2A and 2B), LGS
11 (Table 3), MGS (Table 4), and SGS (Table 5). Development of a custom billing
12 tool for each potential project would be cost-prohibitive for many businesses.

13 **Q. Please explain, as an example, what Table 2 represents.**

14 A. Tables 2A and 2B provide a very basic side by side accounting of the charges for
15 LPS service (customer, facilities, summer demand, winter demand, summer
16 energy, winter energy) and SSR service (customer, facilities, standby contract
17 capacity, backup summer, maintenance winter, backup energy, maintenance
18 energy). The LPS rate schedule is the most complex to evaluate with regard to
19 SSR application, as there are four possible voltage scenarios, and declining block
20 rates for both demand and energy. LPS is also the most likely of the applicable
21 classes to implement CHP.

1 TABLE 2A – LPS/SSR Proposed Rate Assessment - page 1

LPS Proposed Rates page 1		SSR Proposed Rates				
Schedule LPS	A Secondary Voltage	B Primary Voltage	C SSR < 2 MW	D SSR > 2 MW	SSR - Applicable Charges	
1	Minimum Demand, kW	1000	1000			
2	Customer Charge (\$)	\$1,160.53	\$1,160.53	\$0.00	\$430.00	Metering & Admin Charge
3						
4	Facilities Charge (\$/kW)	\$3.887	\$3.221	\$1.844	\$1.844	Capacity Reservation Charge per kW of Standby Contract Capacity (SCC)
5						
6	Summer Demand Charge (\$/kW)			\$7.774	N/A	Interconnection Charge per kW of SCC
7	Block 1 – First 2443 kW(A)/ 2500 kW(B)	\$15.079	\$14.732			
8	Block 2 – next 2443 kW(A)/ 2500 kW(B)	\$12.061	\$11.787			Daily Demand Charge, \$/kW/day
9	Block 3 – next 2443 kW(A)/ 2500 kW(B)	\$10.104	\$9.872	N/A	\$0.628	Backup (summer season)
10	Block 4 – over 7239 kW(A)/ 7500 kW(B)	\$7.376	\$7.208	N/A	\$0.503	Maintenance (winter season)
11	Winter Demand Charge (\$/kW)					
12	Block 1 – First 2443 kW(A)/ 2500 kW(B)	\$10.250	\$10.012			
13	Block 2 – next 2443 kW(A)/ 2500 kW(B)	\$7.998	\$7.816			
14	Block 3 – next 2443 kW(A)/ 2500 kW(B)	\$7.056	\$6.894			
15	Block 4 – over 7239 kW(A)/ 7500 kW(B)	\$5.432	\$5.309			
16	Summer Energy Charge (\$/kW)					
17	Block 1 – first 180 hours use	\$0.09442	\$0.09226	N/A	\$0.09442	Backup Energy Charge, \$/kWh
18	Block 2 – second 180 hours use	\$0.05612	\$0.05485			
19	Block 3 – over 360 hours use	\$0.02693	\$0.02630			
20	Winter Energy Charge (\$/kW)					
21	Block 1 – first 180 hours use	\$0.08004	\$0.07821	N/A	\$0.05612	Maintenance Energy Charge, \$/kWh
22	Block 2 – second 180 hours use	\$0.05105	\$0.04987			
23	Block 3 – over 360 hours use	\$0.02666	\$0.02605			

1 TABLE 2B – LPS/SSR Proposed Rate Assessment - page 2

LPS Proposed Rates page 2		SSR Proposed Rates				
Schedule LPS	A Substation Voltage	B Transmission Voltage	C SSR < 2 MW	D SSR > 2 MW	SSR - Applicable Charges	
1	Minimum Demand, kW	1000	1000			
2	Customer Charge (\$)	\$1,160.53	\$1,160.53	\$0.00	\$430.00	Metering & Admin Charge
3						
4	Facilities Charge (\$/kW)	\$0.972	\$0.00	\$1.844	\$1.844	Capacity Reservation Charge per kW of Standby Contract Capacity (SCC)
5						
6	Summer Demand Charge (\$/kW)			\$7.774	N/A	Interconnection Charge per kW of SCC
7	Block 1 – first 2530 kW(A)/2553 kW(B)	\$14.557	\$14.431			
8	Block 2 – next 2530 kW(A)/2553 kW(B)	\$11.645	\$11.541			Daily Demand Charge, \$/kW/day
9	Block 3 – next 2530 kW(A)/2553 kW(B)	\$9.755	\$9.666	N/A	\$0.628	Backup (summer season)
10	Block 4 – over 7590 kW(A)/7659 kW(B)	\$7.123	\$7.059	N/A	\$0.503	Maintenance (winter season)
11	Winter Demand Charge (\$/kW)					
12	Block 1 – first 2530 kW(A)/2553 kW(B)	\$9.896	\$9.807			
13	Block 2 – next 2530 kW(A)/2553 kW(B)	\$7.724	\$7.655			
14	Block 3 – next 2530 kW(A)/2553 kW(B)	\$6.814	\$6.754			
15	Block 4 – over 7590 kW(A)/7659 kW(B)	\$5.246	\$5.199			
16	Summer Energy Charge (\$/kW)					
17	Block 1 – first 180 hours use	\$0.09118	\$0.09037	N/A	\$0.09442	Backup Energy Charge, \$/kWh
18	Block 2 – second 180 hours use	\$0.05421	\$0.05371			
19	Block 3 – over 360 hours use	\$0.02598	\$0.02576			
20	Winter Energy Charge (\$/kW)					
21	Block 1 – first 180 hours use	\$0.07731	\$0.07660	N/A	\$0.05612	Maintenance Energy Charge, \$/kWh
22	Block 2 – second 180 hours use	\$0.04928	\$0.04885			
23	Block 3 – over 360 hours use	\$0.02574	\$0.02550			

1 TABLE 3. LGS/SSR Rate Proposed Rate Assessment

Large General Service Proposed Rate		SSR Proposed Rates				
Schedule LGS	A Secondary Voltage	B Primary Voltage	C SSR < 2 MW	D SSR > 2 MW	SSR - Applicable Charges	
1	Minimum Demand, kW	200	200			
2	Customer Charge (\$)			\$0.00	\$130.00	Metering & Admin Charge
3	0-24 kW	\$120.11	\$120.11			
4	25 – 199 kW	\$120.11	\$120.11			
5	200 – 999 kW	\$120.11	\$120.11			
6	1000 kW or more	\$1,025.43	\$1,025.43			
7				\$1.716	\$1.716	Capacity Reservation Charge per kW of Standby Contract Capacity (SCC)
8	Facilities Charge (\$/kW)	\$3.436	\$2.849			
9				\$6.872	N/A	Interconnection Charge per kW of SCC
10	Demand Charge (\$/kW)					Daily Demand Charge, \$/kW/day
11	Summer	\$6.862	\$6.706	N/A	\$0.286	Backup (summer season)
12	Winter	\$3.692	\$3.608	N/A	\$0.229	Maintenance (winter season)
13	Summer Energy Charge (\$/kWh)					
14	Block 1 – first 180 hours use	\$0.10077	\$0.09851	N/A	\$0.10077	Backup Energy Charge, \$/kWh
15	Block 2 – second 180 hours use	\$0.06922	\$0.06757			
16	Block 3 – over 360 hours use	\$0.04473	\$0.04368			
17	Winter Energy Charge (\$/kWh)					
18	Block 1 – first 180 hours use	\$0.09259	\$0.09048	N/A	\$0.06922	Maintenance Energy Charge, \$/kWh
19	Block 2 – second 180 hours use	\$0.05321	\$0.05194			
20	Block 3 – over 360 hours use	\$0.03759	\$0.03686			

Rebuttal Testimony (Rate Design) of
Jane E. Epperson
Case Nos. ER-2018-0145 and ER-2018-0146

I TABLE 4. MGS/SSR Proposed Rate Assessment

Medium General Service Proposed Rate		SSR Proposed Rates				SSR - Applicable Charges
Schedule MGS	A Secondary Voltage	B Primary Voltage	C SSR < 2 MW	D SSR > 2 MW		
1	Minimum Demand , kW	25	25			
2	Customer Charge (\$)			\$0.00	\$110.00	Metering & Admin Charge
3	0-24 kW	\$55.82	\$55.82			
4	25 – 199 kW	\$55.82	\$55.82			
5	200 – 999 kW	\$113.35	\$113.35			
6	1000 kW or more	\$967.90	\$967.90			
7						
8	Facilities Charge (\$/kW)	\$3.243	\$2.688	\$1.062	\$1.062	Capacity Reservation Charge per kW of Standby Contract Capacity (SCC)
9				\$6.486	N/A	Interconnection Charge per kW of SCC
10	Demand Charge (\$/kW)					Daily Demand Charge, \$/kW/day
11	Summer	\$4.243	\$4.144	N/A	\$0.177	Backup (summer season)
12	Winter	\$2.159	\$2.107	N/A	\$0.142	Maintenance (winter season)
13	Summer Energy Charge (\$/kWh)					
14	Block 1 – first 180 hours use	\$0.11090	\$0.10825	N/A	\$0.11090	Backup Energy Charge, \$/kWh
15	Block 2 – second 180 hours use	\$0.07586	\$0.07415			
16	Block 3 – over 360 hours use	\$0.06398	\$0.06251			
17	Winter Energy Charge (\$/kWh)					
18	Block 1 – first 180 hours use	\$0.09584	\$0.09358	N/A	\$0.07586	Maintenance Energy Charge, \$/kWh
19	Block 2 – second 180 hours use	\$0.05735	\$0.05603			
20	Block 3 – over 360 hours use	\$0.04810	\$0.04719			

1. TABLE 5. SGS/SSR Proposed Rate Assessment

Small General Service Proposed Rate		SSR Proposed Rates				
Schedule SGS	A Secondary Voltage	B Primary Voltage	C SSR < 2 MW	D SSR > 2 MW	SSR - Applicable Charges	
1	Minimum Demand, kW	0	0			
2	Customer Charge (\$)			\$0.00	\$110.00	Metering & Admin Charge
3	0-24 kW	\$19.27	\$19.27			
4	25 – 199 kW	\$53.42	\$53.42			
5	200 – 999 kW	\$108.21	\$108.51			
6	1000 kW or more	\$926.52	\$926.52			
7	Facilities Charge (\$/ kW)					
8	Block 1 – first 25 kW	\$0.000	\$0.000	\$1.062	\$1.062	Capacity Reservation Charge per kW of Standby Contract Capacity (SCC)
9	Block 2 – all over 25 kW	\$3.104	\$3.031			
10				\$6.208	N/A	Interconnection Charge per kW of SCC
11	Demand Charge (\$/kW)					Daily Demand Charge, \$/kW/day
12	Summer	\$0.000	\$0.000	N/A	\$0.177	Backup (summer season)
13	Winter	\$0.000	\$0.000	N/A	\$0.142	Maintenance (winter season)
14	Summer Energy Charge (\$/ kWh)					
15	Block 1 – first 180 hours use	\$0.17197	\$0.16804	N/A	\$0.17197	Backup Energy Charge, \$/kWh
16	Block 2 – second 180 hours use	\$0.08162	\$0.07973			
17	Block 3 – over 360 hours use	\$0.07270	\$0.07103			
18	Winter energy charge (\$/kWh)					
19	Block 1 – first 180 hours use	\$0.13361	\$0.13058	N/A	\$0.08162	Maintenance Energy Charge, \$/kWh
20	Block 2 – second 180 hours use	\$0.06524	\$0.06375			
21	Block 3 – over 360 hours use	\$0.05889	\$0.05752			

1 **Q. What formula was created by the Companies for calculating the value of the**
2 **proposed SSR's daily demand charge for backup?**

3 A. In response to Data Requests DED-300 and DED-311, the Companies define the
4 daily demand charge for backup as 125% of the generally available rateschedule
5 summer demand, expressed as a daily rate (1/30th). To understand the origin and
6 implication of this definition, using the LGS class as an example, please refer to
7 Table 3. Cell d11 contains the proposed value for the daily backup demand charge
8 of \$0.286. The Companies selected the highest possible block demand charge
9 (secondary voltage, summer, cell a11), multiplied by 125%, then divided by 30
10 (days). $\{(\$6.862*125\%)/30 = \$0.286\}$

11 **Q. Is the rate value proposed for the daily demand for backup service for SSR**
12 **customers with greater than 2 MW of required standby capacity in the**
13 **summer season punitive?**

14 A. Yes. The proposed SSR demand charges for backup are without a cost-of-service
15 basis and are punitive.

16 **Q. Can the Companies create an equitable and reasonable SSR formula without**
17 **utilizing cost-of-service related CHP customer data, models or studies?**

18 A. No. The lack of such critical data creates unsupported SSRs. In response to Data
19 Request DED-311, the Companies define the daily demand charge for
20 maintenance as 100% of the generally available rate schedule summer demand,
21 expressed as a daily rate (1/30th). To understand the origin and implication of this
22 definition, using the LGS class as an example, please refer to Table 3. Cell d12
23 contains the proposed value for the daily maintenance demand charge of \$0.229.

1 The Companies selected the highest possible block demand charge (secondary
2 voltage, summer, cell a11), then divided by 30 (days). $\{\$6.862/ 30 = \$0.229\}$

3 **Q. Is the rate value proposed for the daily demand for maintenance service for**
4 **SSR customers with greater than 2 MW of required standby capacity in the**
5 **winter season punitive?**

6 A. Yes. The proposed SSR demand charges for maintenance are without cost-of-
7 service basis and are punitive.

8 **Q. What formula was created by the Companies for calculating the value of the**
9 **proposed interconnection charge for SSR customers with less than 2 MW of**
10 **required standby capacity, absent the utilization of actual CHP customer**
11 **data, models and studies?**

12 A. In response to Data Request DED-311, the Companies define the interconnection
13 charge to be two times the generally available rate facility charge. To understand
14 the origin and implication of this definition, using the LGS class as an example,
15 please refer to Table 3. Cell c9 contains the proposed value for the interconnection
16 charge of \$6.872. The Companies selected the highest facility charge from the
17 generally available rate schedule (cell a8) and doubled it. $\{\$3.436 *2 = \$6.872\}$

18 The interconnection charge is multiplied by the standby contract capacity,
19 representing the amount of capacity required to replace customer generation, and
20 billed to the customer *every month regardless of whether any backup or*
21 *maintenance service was provided* (emphasis added).

22 **Q. Is the interconnection charge applicable to SSR customers with less than 2**
23 **MW of required standby capacity reasonable?**

1 A. No. For SSR customers with less than 2 MW of required standby capacity, all
2 usage is billed under the generally available rate schedule as supplemental
3 service, incurring both facilities and demand charges. For SSR customers, the
4 interconnection charge is in addition to the as-used, supplemental facilities and
5 demand charges billed to the customer every month. At a given customer load, a
6 reduction in the amount of customer generator output results in an equal increase
7 in the amount of supplemental service taken from the utility. Therefore, as the
8 customer accesses the standby capacity for which fixed charges are paid every
9 month, the customer is likewise paying facilities and demand charges for the same
10 capacity under supplemental service.

11 To more fully understand the implication of this duplicative charge, using the LGS
12 class as an example, please refer to Table 3. The customer is paying an
13 interconnection fee (cell c9) of \$6.872 and also a capacity reservation charge (cell
14 c7) of \$1.716, for a total fixed charge of \$8.588 per kW of standby capacity, every
15 month. The customer taking secondary voltage service is also paying a facilities
16 charge (cell a8) of \$3.436 and a demand charge of \$3.692 (cell a12), if in the
17 winter season, or \$6.862 (cell a11), if in the summer, for total supplemental
18 charges ranging from \$7.128 (winter) to \$10.298 (summer) per kW of supplemental
19 demand. Therefore, the customer is paying, in total, \$15.716 per kW in the winter
20 and \$18.886 per kW in the summer for demand-related charges for the overlapping
21 standby and supplemental capacity. DE recommends elimination of the
22 interconnection charge and the 2 MW delineation from the SSR so that customers
23 are treated equally.

1 **Q. Are the definitions and basis of the facility charges and their relationship to**
2 **the demand charges clearly stated within the generally available rate**
3 **schedules or the proposed SSR?**

4 A. No. The definitions and basis of the facilities charges and their relationship to the
5 demand charges are not explicit within the generally available rate schedules or
6 within the proposed SSR, contributing to lack of transparency. One must seek out
7 the definitions of facilities charges and demand charges (Schedule 2) on the
8 Companies' website. The facility charges relate to, and are calculated upon, facility
9 demands, which are equal to the higher of: a) the highest monthly maximum
10 demand occurring in the last 12 months including the current month, or b) the
11 minimum demand. The demand charges relate to, and are calculated upon, billing
12 demand for the month. This lack of definition within the rate schedule is an example
13 of the violation of the Bonbright rate principle of simplicity, understandability, and
14 feasibility of application.

15 **Q. What formula was created by the Companies for calculating the value of the**
16 **proposed SSR's capacity reservation charges, without the benefit of utilizing**
17 **actual CHP customer data, models and studies?**

18 A. The capacity reservation charge is textually defined in the proposed SSR as an
19 additional charge, based on the size of the distributed generation, applied to
20 recover the cost of providing and maintaining the generation and transmission
21 facilities required to support the capacity requirements of the customer. In
22 response to Data Request DED-300, the Companies' formula for calculating the
23 capacity reservation charge is 25% of the generally available summer demand

1 charge. To understand the origin and implication of this calculation, using the LGS
2 class as an example, please refer to Table 3. Cell c7 contains the proposed value
3 for the capacity reservation charge of \$1.716. The Companies selected the highest
4 demand charge from the generally available rate schedule (cell a11) and
5 quartered it $\{\$6.862/4 = \$1.716\}$. The capacity reservation charge is multiplied by
6 the standby contract capacity, representing the amount of capacity required to
7 replace customer generation, and billed to the customer every *month regardless*
8 *of whether any backup or maintenance service was provided*. As described for the
9 interconnection charge applicable to SSR customers with less than 2 MW of
10 required standby capacity, the capacity reservation charge results in duplicative
11 billing of demand-related charges. This is further justification for DE's previous
12 recommendation to eliminate the 2 MW delineation (and the interconnection
13 charge) from the proposed SSR.

14 **Q. Is the rate value proposed for the fixed capacity reservation charge for the**
15 **SSR customer punitive?**

16 **A.** Yes. DE recommends a capacity reservation charge that reflects the actual load
17 characteristics associated with CHP systems including the high availability and low
18 forced outage frequency, which make these systems highly resilient as well as
19 efficient.

20 **Q. What formula was created by the Companies for calculating the value of the**
21 **proposed backup energy charge for SSR customers with more than 2 MW of**

1 **required standby capacity, absent the utilization of actual CHP customer**
2 **data, models and studies?**

3 A. In response to Data Request DED-300, the Companies calculate the SSR backup
4 energy charge as 100% of the first energy block of the generally available rate
5 summer base energy charge. To understand the origin and implication of this
6 definition, using the LGS class as an example, please refer to Table 3. The
7 proposed backup energy charge is found in cell a14 (\$0.10077). The Companies
8 selected the highest possible block charge (secondary voltage, block 1, summer
9 season—cell a14) and applies it all year.

10 Q. **Is the proposed charge for SSR backup energy in the summer, in principle,**
11 **agreeable to DE?**

12 A. Yes. In principle. DE agrees that the charge for actual backup energy usage for
13 unplanned outages occurring during on-peak time periods may reflect the seasonal
14 energy charge for the first block of the generally available rate schedule. The
15 summer first block rate should only apply to summer standby energy usage and
16 only during on-peak time periods. During winter season, the charge for standby
17 energy usage during on-peak time periods should not exceed the winter season
18 energy charge for the first block of the generally available rate schedule.

1 **Q. What formula was created by the Companies for calculating the value of the**
2 **maintenance energy charge for SSR customers with more than 2 MW of**
3 **required standby capacity particularly, since the companies did not rely**
4 **upon cost-of-service related CHP customer data, models or studies?**

5 A. In response to Data Request DED-300, the Companies calculate the SSR
6 maintenance energy charge as 100% of the second energy block of generally
7 available rate summer base energy charge (if no second block is present, set to
8 100% of first energy block). To understand the origin and implication of this
9 calculation, using the LGS class as an example, please refer to Table 3. The
10 proposed maintenance energy charge is found in cell a15 (\$0.06922).

11 **Q. Is the proposed charge for SSR maintenance energy, in principle, agreeable**
12 **to DE?**

13 A. No. DE recommends that energy charges for maintenance service be the same as
14 seasonal energy charges under the generally available rate schedule. The energy
15 charge applicable to maintenance service should not exceed the seasonal energy
16 charge of the first block of the generally available rate schedule and should only
17 apply to energy usage during on-peak time periods.

18 **Q. Under what conditions do the Companies propose to allow maintenance**
19 **service?**

20 A. The Companies propose to allow maintenance service when the metered
21 customer-generated output is less than the minimum operating limit and less
22 than the total customer load during any time in the winter period.
23

1 **Q. Have the Companies proposed a restricted opportunity for customer-**
2 **generation maintenance?**

3 A. Yes, the Companies propose limiting planned maintenance of customer-
4 generator systems to the winter season. For LPS, LGS, and MGS customers,
5 winter season is defined as eight consecutive months, beginning and effective
6 September 16 and ending May 15. For SGS customers winter season is not
7 defined.

8 **Q. Is the customer-generator maintenance restriction to four months out of**
9 **the year fair, reasonable or prudent?**

10 A. No. Limiting scheduled maintenance to the winter season is without basis. If the
11 winter season was synonymous with off-peak it would have meaning, but it is not.
12 It is reasonable for the Companies to restrict maintenance service to times
13 associated with off-peak periods. Peak periods are defined in the Large Power
14 Service Off-Peak Rider (Schedule 3). Maintenance should be allowed during any
15 month with advanced permission received by the Companies. The customer
16 should have reasonable opportunity to perform scheduled maintenance without
17 incurring excessive charges. DE recommends allowing scheduled maintenance
18 to occur during off-peak periods without incurring maintenance service charges,
19 and during on-peak periods without incurring maintenance service charges
20 provided that the resulting customer load remains below a defined supplemental
21 contract capacity.

1 **Q. What does the 2 MW delineation proposed by the Companies add to the**
2 **SSR?**

3 A. The 2 MW delineation adds an unnecessary level of complexity that makes
4 understanding the bill impact more difficult. The 2 MW delineation and
5 associated variation in energy and demand charges does not appear to be based
6 in cost-of-service principles and results in discriminatory treatment of customers.

7 **Q. Do the Companies propose a fixed interconnection charge for SSR**
8 **customers with more than 2 MW of required standby capacity?**

9 A. No. In lieu of the fixed interconnection charge, customers with more than 2 MW
10 of required standby contract capacity would be charged a daily demand fee for
11 as-used standby service. As described earlier, an example LGS customer would
12 be charged \$0.286 per kW per day for backup service and \$0.229 per kW per day
13 for maintenance service. The different rate treatment of the customer under 2
14 MW and the customer over 2 MW of self-generation is without cost-of-service
15 basis and is discriminatory against the smaller customer.

16 **Q. Is a proposed daily demand charge for standby service usage, in principle,**
17 **agreeable to DE?**

18 A. Yes. In principle DE agrees that daily demand charges based upon actual
19 standby usage are agreeable, but with limitations. Daily demand charges should
20 not be levied inequitably or punitively. A customer using scheduled maintenance
21 service for a full month (30 days) should pay no more in total demand-related
22 charges (demand and facilities) than would be charged under the generally
23 available rate schedule. The customer should have an opportunity to take

1 maintenance service over shorter durations and during off-peak times without
2 incurring the daily demand charge. The charge for unscheduled standby service,
3 or backup service, should be higher than the charge for scheduled maintenance
4 service. The highest daily charge should be levied during on-peak times during
5 the summer season in order to motivate the customer to maximize CHP system
6 availability during that time.

7 **Q. How does the Companies' proposed SSR measure up to the Bonbright**
8 **Principle of promoting efficient use of energy and competing products and**
9 **services?**

10 A. Inadequately. The Companies' proposed SSR is discriminatory toward customer
11 generation through CHP, thus discouraging energy efficiency and the associated
12 resiliency and business benefits it can provide.

13 **Q. Do the Companies require CHP customers to incur the expense of a second**
14 **meter?**

15 A. Yes. CHP customers with more than 2 MW of standby capacity would be required
16 to pay for a second meter installed by the Companies to measure customer
17 generation output.

18 **Q. Is the requirement of a second meter appropriate or necessary?**

19 A. No. Two meters are not necessary for a customer with a behind the meter CHP
20 system to be served by their utility.

21 **Q. Does the proposed requirement of two meters increase bill complexity and**
22 **create unnecessary and additional charges?**

23 A. Yes. The two meters may result in duplicative demand and facilities charges.

1 Q. Is the basic equation for customer billing provided in either the SSR or the
2 associated generally available rate schedules?

3 A. No.

4 Q. How do the Companies' proposed SSR measure up to the Bonbright
5 principle of fairness of the specific rates in the appointment of total cost-of-
6 service among the different consumers?

7 A. Inadequately. Specifically, 1) without utilizing any cost-of-service related CHP
8 customer data, models, or studies, the proposed SSR rates are not cost-of-service
9 based; 2) the proposed SSR double bills for demand related to customer
10 generation capacity; 3) customer generation reservation demand charges are not
11 based on the utility's cost and the forced outage rate, as they should be¹¹; 4) fixed
12 monthly charges for generation, transmission, and distribution are not
13 distinguished from each other as they should be; 5) a reasonable balance between
14 fixed and variable charges (fixed charges are too high) is absent; 6) SSR daily
15 demand charges and energy charges should not apply to standby customers in
16 conjunction with scheduled maintenance service unless actual demand, including
17 scheduled maintenance, exceeds the supplementary contract capacity; 7) SSR
18 daily demand charges and energy charges should not apply to standby customers
19 in conjunction with unscheduled backup service unless actual demand, including
20 backup service, exceeds the supplementary contract capacity; and 8) annual
21 avoided cost percentage should be 90 percent or more for all classes of service.

¹¹ <http://raponline.org/documents/download/id/7020> (Standby Generation Reservation Charge, page 13)

1 **V. RECOMMENDATIONS**

2 **Q. What are DE's recommendations to the Missouri Public Service Commission**
3 **regarding the proposed SSR?**

4 **A.** DE recommends that the Companies incorporate the progress made through the
5 Ameren Missouri SSR collaborative effort and adapt it to mesh with the generally
6 available rate schedule structure. Specifically, DE recommends that the
7 Companies:

8 1. Adopt the following collaboratively developed definitions found in the Ameren
9 Missouri SSR (Schedule 1): supplementary contract capacity, on/off peak hours,
10 supplemental service, standby service, backup service, maintenance service,
11 standby contract capacity, supplemental demand, standby service demand, and
12 total billing demand.

13 2. Define the capacity reservation charge as an as-used charge that reflects the
14 high availability and low forced outage rates associated with CHP systems.

15 3. Replace the minimum operating limit definition with supplemental contract
16 capacity, defined as 90 % of the historic or probable loads of the facility minus the
17 standby contract capacity; and order that standby daily demand and associated
18 energy charges apply only when customer load exceeds the supplemental contract
19 capacity during on-peak periods.

20 4. Adopt the collaboratively developed tariff structure that provides transparency
21 regarding fixed charges (administrative, generation and transmission access and
22 seasonal facilities charges); seasonal daily demand charges for backup and
23 maintenance service; and seasonal energy charges.

1 5. Eliminate the interconnection charge and the 2 MW/10 MW delineation from
2 the proposed SSR.

3 6. Ensure that scheduled maintenance can occur a) during off-peak periods
4 without incurring maintenance service charges, and b) during on-peak periods
5 without incurring maintenance service charges provided that the resulting
6 customer load remains below the defined supplemental contract capacity.

7 7. Ensure that the energy charge applicable to maintenance or backup service
8 does not exceed the seasonal energy charge of the first block of the generally
9 available rate schedule and only applies to energy usage during on-peak periods
10 when the customer load exceeds the supplemental contract capacity.

11 8. Develop a tool to facilitate customer understanding of the bill impact given
12 various usage and generation scenarios the customer may desire to evaluate.
13 Duplicate the steps taken by Ameren Missouri in producing their study tool¹²,
14 including:

- 15 • Develop annual load profiles based upon average customer class
16 data for each of the applicable customer classes and voltage service
17 levels to use in the billing tool.
- 18 • Create a customer generation profile reflecting the approach used in
19 the Ameren Missouri SSR development.

¹² <https://www.ameren.com/missouri/business/rates/electric-rates/rider-ssr>

- 1 • Develop an annual billing tool to analyze the combined billing impact
2 of SSR and supplemental charges with and without customer
3 generation.
4 • Balance the combination of fixed and as-used charges to achieve
5 avoided cost percentages for each of the classes greater than 90%.
6 • Modify the annual billing tool for each class to create a customer-
7 usable tool, to reflect the Companies' rate structure, and make it
8 available on the Companies' website.
- 9 9. Conduct a class cost-of-service study so that non-discriminatory rates can be
10 applied to this distinct class of customer.
- 11 **Q. Does this conclude your testimony?**
- 12 **A. Yes.**