BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY LOUISIANA, LLC FOR APPROVAL OF REGULATORY BLUEPRINT NECESSARY FOR COMPANY TO STRENGTHEN THE ELECTRIC GRID FOR STATE OF LOUISIANA

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DOCKET NO. U-____

DIRECT TESTIMONY

OF

MATTHEW S. KLUCHER

ON BEHALF OF

ENTERGY LOUISIANA, LLC

AUGUST 2023

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Exhibit MSK-1 Summary of Testimony

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1		I. <u>INTRODUCTION</u>
2	Q1.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.
3	A.	My name is Matthew S. Klucher. My business address is 639 Loyola Avenue, New
4		Orleans, LA 70113. I am employed by Entergy Services, LLC ("ESL") ¹ as Director,
5		Utility Rates and Pricing.
6		
7	Q2.	ON WHOSE BEHALF ARE YOU SUBMITTING THIS DIRECT TESTIMONY?
8	A.	I am submitting this Direct Testimony to the Louisiana Public Service Commission
9		("LPSC" or the "Commission") on behalf of Entergy Louisiana, LLC ("ELL" or the
10		"Company"). When I refer to ELL or the Company in my testimony, I am referring
11		to the single operating company which, generally speaking, is a combination of the
12		prior two companies, Legacy ELL and Legacy Entergy Gulf States Louisiana, LLC
13		("Legacy EGSL"). ²
14		
15	Q3.	PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL
16		BACKGROUND.
17	Α.	I received a Bachelor of Science degree in Mathematics and Minor in Statistics from
18		the University of Arkansas at Little Rock in 1997. In April 2018, I accepted my

¹ ESL is a service company to the five Entergy Operating Companies ("EOCs"), which are Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, and Entergy Texas, Inc.

² On September 14, 2015, the LPSC issued Order No. U-33244-A, formally approving the business combination of Legacy EGSL and Legacy ELL, through which those companies combined substantially all of their respective assets and liabilities into a single operating company, Entergy Louisiana Power, LLC, which subsequently changed its name to Entergy Louisiana, LLC ("ELL"). Upon consummation of the business combination, ELL became the public utility that is subject to LPSC regulation and is the successor of Legacy EGSL and Legacy ELL.

1 current position with ESL as Director of Utility Rates and Pricing in the Regulatory 2 Compliance organization. Prior to joining ESL, I worked for the General Staff 3 ("Staff") of the Arkansas Public Service Commission ("APSC"). I began my career 4 with the APSC in March 2010 as a Rate Analyst in the Cost Allocation and Rate 5 Design Section where I was involved with developing and evaluating class cost of 6 service studies, evaluating rate design, and reviewing utility sponsored energy 7 efficiency programs. In September 2012, I was promoted to Director of the Cost 8 Allocation and Rate Design Section. Prior to joining the APSC Staff, I worked in the 9 telecommunication industry in wholesale tariff administration and billing as a Senior 10 Analyst for Windstream Communications, and prior to that I was Senior Analyst with 11 Alltel Wireless in the Strategic Pricing group.

12 I have received specialized utility training by completing the Advanced 13 Regulatory Studies Program at Michigan State University's Institute of Public 14 Utilities, the Introduction to Cost of Service Concepts and Rate Design for Electric 15 Utilities sponsored by Electric Utility Consultants, Inc., the Electric Industry 16 Regulation Course at New Mexico State University's Center for Public Utilities, the 17 Certified Energy Management Courses sponsored by the Association of Energy 18 Engineers, and the Energy Efficiency Management Certificate Program sponsored by 19 the American Public Power Association. I have received training from the 20 Association of Energy Engineers and have qualified as a Certified Energy Manager.

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1	Q4.	WHAT ARE YOUR PRINCIPAL AREAS OF RESPONSIBILITY?
2	А.	In my current position, I am responsible for retail pricing, rate design, and tariffs. In
3		that capacity, I direct and supervise ESL's pricing team that develops and supports
4		pricing structures and tariffs.
5		
6	Q5.	HAVE YOU TESTIFIED PREVIOUSLY IN UTILITY RATEMAKING
7		PROCEEDINGS?
8	A.	Yes. I have testified before the Arkansas Public Service Commission and the Council
. 9		of the City of New Orleans on a variety of issues, including class cost of service
10		studies, cost allocation, revenue distribution, rate design, customer impacts, and
11		energy efficiency issues. A summary of my previous testimony is included in Exhibit
12		MSK-1.
13		ŷ
14	Q6.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
15	А.	My testimony addresses the Company's rate design goals and the rate design
16		principles relied on to move towards a single set of tariffs for all customers. In doing
17		so, I support the revised Company retail rate classes, certain modifications to the
18		residential rate schedules, and the development of the external allocation factors used
19		by the Company in the class cost of service study ("CCOS Study"). My testimony
20		also describes ELL's proposed revenue allocation by rate class and discusses why

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ELL is not setting the revenue to be recovered from each rate class based solely on
 the results of the CCOS Study.³

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4 Q7. PLEASE SUMMARIZE YOUR TESTIMONY.

5 A. My testimony supports ELL's proposed path toward a single set of tariffs. Because 6 Legacy ELL and Legacy EGSL are operationally combined, unified rates are the next 7 logical step. ELL is proposing to combine the two legacy cost structures into a 8 single, fully blended cost structure based on a single base rate revenue requirement, 9 consistent with the fact that ELL is a single utility managing and operating one set of 10 assets to provide service to all of its customers. Eventually serving all customers 11 under a single set of rates as well is a streamlined, customer-centric approach that will 12 eliminate confusion for ELL's customers and remove administrative complexity from ELL's internal processes. Accordingly, the Company is proposing new rate classes 13 14 within its CCOS Study, consolidation and/or elimination of some rate schedules, 15 closure of some rate schedules, and allocation of costs on the present-day cost 16 relationship among the proposed customers classes and not on legacy customer class cost relationships. 17

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The CCOS Study summary reports are Exhibit CEB-2 to the Direct Testimony of Chris E. Barrilleaux.

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1		II. <u>RATE DESIGN GOALS</u>
2	Q8.	WHAT DOES ELL SEEK TO ACHIEVE THROUGH ITS PROPOSED RATE
3		DESIGN?
4	A.	ELL's objective is to move toward a uniform tariff structure that provides fair, just,
5		and reasonable rates for all customers and that is easier for the Company to
6		administer. A streamlined tariff structure, where feasible, would no longer require the
7		need for many complexities that exist today for the majority of ELL's customers,
8		including the right-to-choose provisions. ⁴ For example, whether a residential
9		customer resides in Northeast Louisiana or in Southwest Louisiana, they receive
10		service from the same company and have done so for the last decade. By
11		consolidating legacy residential rate schedules, the efficiencies of the consolidated
12		system will be reflected in all residential customer rates, rate administration will be
13		simplified for the Company, and similarly situated residential customers will have the
14		same rate. While these objectives can be achieved for the residential and industrial
15		customer classes, the commercial customer rate schedules pose some unique
16		challenges to combine them without significant rate impacts. These challenges are
17		further addressed in the Direct Testimony of Company witness Elizabeth C. Ingram.
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⁴ Right-to-choose ("RTC") provisions were enacted by the Business Combination Order and allow nonresidential customers of one legacy area to access rates of the other legacy area under certain circumstances.

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1	Q9.	DOES ELL RECOMMEND RETAINING SOME EXISTING LEGACY TARIFFS
2		FOR EXISTING CUSTOMERS WHILE CLOSING THEM TO NEW
3		CUSTOMERS, OTHERWISE REFERRED TO AS "GRANDFATHERING"?
4	A.	Yes. In summary, most of the commercial and industrial Legacy EGSL and Legacy
5		ELL customers will remain on their current rate schedule, but some of the rate
6		schedules will be closed to new business. Those customers taking service under one
7		of the closed rate schedules will be grandfathered, which is further discussed by Ms.
8		Ingram.
9		
10		III. <u>REVISED RATE CLASSES</u>
11	Q10.	WHAT IS A RATE CLASS?
12	A.	A rate class is a group of customers within the CCOS Study that is generally
13		homogenous in terms of usage characteristics and cost causation. Some rate classes
14		include more than one rate schedule while others may consist of only one rate
15		schedule. Rate classes are important because they form the basis for how costs are
16		allocated among customers. The Company typically does not modify rate classes, but
17		as discussed below, proposing to revise ELL's rate classes is appropriate given the
18		combination of the prior two legacy companies into the consolidated Company.
19		,
20	Q11.	HOW ARE THE COMPANY'S RATE CLASSES CURRENTLY DEFINED?
21	A.	The current ELL rate classes maintain the make-up of Legacy ELL and Legacy EGSL
22		before the business combination. The tables below detail the rate classes and the rate
23		schedules included in each for Legacy ELL and Legacy EGSL.

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TABLE 1 LEGACY ELL RATE CLASSES

RATE CLASS	RATE SCH	IEDULE(S) ⁵
Residential Service	RS-L	MMRA-L
	GS-L	TSL-L
Small General Service	MMGS-L	WHSH-L
	MP-L	UMS-L
Large General Service	LGS-L	
Experimental Electrochemical	EECS-L	
Curtailment Service		
Large Load High Load Factor Power	LLHLFPS-L	
Service		
Large Industrial Power Service	LIPS-L	LAIPS-L
Large Industrial Service	LIS-L	
	NGPCS-L	EOPF-L
Lighting Service	Various schedules	
Right-to-Choose (not a rate class)	GS-G, LPS-G, HLF	S-G

TABLE 2LEGACY EGSL RATE CLASSES

RATE CLASS	RATE SCHEDULE(S)		
Residential Service	RS-G		
Small Conoral Sorrigo	SGS-G	TSS-G	
	UMS-G		
General Service	GS-G	GS-TOD-G	
Lange Derrien Semilee	LPS-G	NGPCS-G	
Large Power Service	LPS-TOD-G		
High Load Factor Service	HLFS-G	HLFS-TOD-G	
Energy Intensive Service	EEIS-G	EIS-G	
Municipal Water Pumping Service	WPS-G		
Lighting Service	Various schedules		
Right-to-Choose (not a rate class)	GS-L, LLHLFPS-L		

⁵ ELL requested to withdraw LAIPS-L and EOPF-L in an Application submitted in January 2022. See, Docket No. S-36260 (January 20, 2022), Application of Entergy Louisiana, LLC for Approval of the Withdrawal of Certain Tariffs and the Modification of Others. That request is still pending LPSC approval and therefore the two rates, which have not had any customers billed upon them for years, are still included in Table 1.

1 Q12. IS ELL PROPOSING TO REVISE THE RATE CLASSES?

- 2 A. Yes.
- 3

4 Q13. WHY IS ELL PROPOSING TO REVISE THE RATE CLASSES?

5 A. ELL's ultimate goal is to transition from having two legacy rate structures to a single 6 unified rate structure based on a single base rate revenue requirement, consistent with 7 the fact that ELL is a single utility managing and operating one set of assets to 8 provide service to all its customers. As such, the Company should have a single set 9 of rate classes recognizing the current similarities and differences among customers 10 and not based on the historical classes of two different legacy utilities. Further, the 11 Company is proposing to allocate costs among the proposed rate classes using the 12 various cost allocation methodologies traditionally accepted by the Commission. The 13 rate classes proposed by the Company in this filing reasonably align ELL's customers 14 according to the manner in which they impose costs onto the system.

15

16 Q14. HOW HAS THE COMPANY PROPOSED TO REVISE THE RATE CLASSES?

A. The Company seeks to consolidate the legacy rate classes by reducing the current
 seventeen legacy rate classes to ten rate classes. The following table details the new
 proposed Company rate classes and the rate schedules included in each.

1
2

TABLE 3 PROPOSED ELL RATE CLASSES

RATE CLASS	RATE SCHEDULE(S)		
Residential Service	RS	MMRA-L	
	SGS-G	GS-L	
Small General Service	UMS-G&L	TSS-G & TSL	
	MMGS-L		
General Service	GS-G	GS-TOD-G	
	LGS-L		
Lance Devuer Service	LPS		
Large Power Service	LPS-TOD		
High Load Factor Service	HLFS	HLFS-TOD	
Large Load High Load Factor Power	LLHLFPS		
Service			
Municipal Pumping Service	WPS	MP-L	
Legacy Industrial Pates	EEIS-G	EECS-L	
	EIS-G		
Large Industrial Service	LIS-L	LIPS-L	
	NGPCS		
Lighting Service	Various G&L	(

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4 Q15. ARE ALL OF THE RATE SCHEDULES WITHIN THE TABLE ABOVE BEING 5 COMBINED?

A. No. For the most part, the only base rate schedules being combined between the
legacy companies are the legacy residential rate and natural gas pipeline compression
service schedules. I explain the combination of the residential rate schedules in more
detail below. Also, as described by Ms. Ingram, certain lighting schedules and legacy
schedules for purchases from large co-generation facilities are being combined.
Otherwise, each of the other rate schedules will continue to be offered as they exist
today, subject to specific adjustments and modifications described by Ms. Ingram.

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1		IV. <u>RATE CLASS ALLOCATION FACTORS</u>
2	Q16.	WHAT ARE ALLOCATION FACTORS?
3	A.	In general, allocation factors are the mechanism used to distribute a utility's costs to
4		groups of customers in a CCOS Study. Allocation factors are used in the CCOS
5		Study to allocate ELL's costs among the various retail rate classes to reflect cost
6		causation.
7		
8	Q17.	WHAT ARE EXTERNAL ALLOCATION FACTORS?
9	Α.	External allocation factors are types of allocation factors, which are developed
10		independently from the CCOS Study. They are developed using cost causation
11		characteristics of customers that are external to the CCOS Study, such as peak
12		demands, energy usage, number of customers, and number of meters. Examples of
13		external allocation factors are production demand, production energy, and
14		transmission demand.
15		
16	Q18.	PLEASE SUMMARIZE THE EXTERNAL ALLOCATION FACTORS USED IN
17		THE COMPANY'S CCOS STUDY.
18	A.	The following table lists the external allocation factors used in the Company's CCOS
19		Study. I describe these factors in detail below. These factors historically have been
20		used by the Company and are consistent with those traditionally accepted by the
21		Commission.

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TABLE 4 EXTERNAL ALLOCATION FACTORS

	Function	Classification	External Allocation Factor
1) Pro	duction:		
А.	Energy-related	Energy	Energy
В.	Demand-related	Demand	Average 12CP Adjusted
2) Tra	insmission	Demand	Average 12CP Adjusted
3) Dis	stribution:		
А.	Substations &	Demand	Maximum Diversified Demand at
	Primary Lines		Primary Voltage
В.	Transformer &	Demand	50/50 Weighting of Maximum
	Secondary Lines		Diversified Demand and Non-
			Coincident Maximum Demand at
			Secondary Voltage
<u> </u>	Meters	Customer	Meter Investment
D.	Service Drops	Customer	Weighted Customers
4) Cu	stomer:		
Α.	Customer	Customer	Weighted Customers
	Records &		
	Collections		
В.	Customer	Customer	Weighted Customers
	Service &		
	Information		
C.	Meter Reading	Customer	Weighted Customers
D.	Customers	Customer	Average Numbers of Customers

3

4	Q19.	IS THERE DOCUMENTATION SUPPORTING THE DEVELOPMENT OF YOUR
5		PROPOSED EXTERNAL ALLOCATION FACTORS?

A. Yes. The external allocation factors used in the CCOS Study are presented in
Company witness Chris E. Barrilleaux's Exhibit CEB-3⁶. Below I provide a highlevel narrative explaining the development of the external allocation factors.

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Id. at pp. 236-237.

Q20. HOW IS THE COMPANY PROPOSING TO ALLOCATE ENERGY-RELATED, OR VARIABLE, PRODUCTION COSTS? A. The Company is proposing to allocate these costs based on the sales per kilowatt-hour

4 ("kWh") for each rate class during the test year because these costs are a function of
5 utilization that is reflected by energy consumption.

6

Q21. PLEASE DISCUSS THE METHOD BY WHICH THE COMPANY IS PROPOSING TO ALLOCATE DEMAND-RELATED GENERATION COSTS AND TRANSMISSION COSTS.

The method used for the allocation of demand-related generation costs and 10 Α. transmission costs is based on the average relationship of each rate class's 11 contribution to the Company's twelve highest monthly peak loads. This method is 12 13 commonly referred to as the average twelve coincident peak ("Average 12CP") The Average 12CP demands associated with curtailable or 14 methodology. interruptible loads served under the Legacy ELL Large Industrial Power Service, 15 16 Large Industrial Service, and Experimental Electrochemical Curtailment Service rate schedules, were adjusted to 15 percent of actual demands for the development of 17 production allocation factors. This adjustment was made because these customers 18 may be curtailed or interrupted at the time of Company peak. The adjustment to 15 19 20 percent recognizes these customers' demand responsibility for reserves. The 21 Company traditionally has employed such an adjustment, which the LPSC 22 traditionally has accepted.

23

1Q22. WHY IS THE COMPANY PROPOSING THE AVERAGE 12CP METHOD TO2ALLOCATE DEMAND-RELATED GENERATION COSTS AND3TRANSMISSION COSTS?

A. The Company is proposing the Average 12CP method for demand-related generation
costs and transmission costs because it provides a reasonable balance between the two
primary costing concerns '(contribution to the Company peak and energy
requirements), and reasonably reflects the mix of the Company's customers and their
respective electrical load curves over the test year, rather than at a specific point in
time. As I said before, the Company has traditionally used this methodology in
previous filings before this Commission.

11

12 Q23. PLEASE DESCRIBE THE DISTRIBUTION AND CUSTOMER SERVICE-13 RELATED ALLOCATION FACTORS THAT THE COMPANY IS PROPOSING.

A. Distribution substation and primary line costs are localized in nature and are designed
and constructed to handle loads close to the point of ultimate use. Consequently, I
have used the simultaneous peak load of each rate class, which is referred to as the
Maximum Diversified Demand ("MDD"), as the basis for allocation of these costs.

Line transformer and secondary line costs are even more localized than distribution substations and primary lines. In some cases, line transformers and secondary lines are installed to supply power to a single customer. At most, these facilities serve a very limited number of customers. Accordingly, I have developed an allocation factor that consists of a 50/50 weighting of the MDD and the Non-Coincident Maximum Demand ("NCP") of each rate class. The NCP for each rate

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1		class represents the summation of the maximum individual demands of all customers
2		in each rate class. Constructing the allocation factor in this manner recognizes that
3		each class exhibits some diversity of load among customers, which is captured in the
4		use of NCPs, while at the same time including loads that are somewhat coincident in
5		nature, which is captured in the use of the MDDs.
6		The allocation factor for meters is based on the applicable average typical
7		meter investment multiplied by the number of meters for that class.
8		The allocation factor for service drops is based on the adjusted average
9		number of customers in each rate class during the test year, weighted by the
10		applicable estimated typical meter investment for that class.
11		The allocation factors for customer-related costs are based on the adjusted
12		average number of customers in each rate class during the test year, weighted by the
13		applicable estimated typical meter investment for that class or the adjusted average
14		number of customers in each rate class during the test year.
15		
16	Q24.	WHAT IS THE BASIS FOR DETERMINING THE DEMAND OF EACH RATE
1 7		CLASS USED TO DEVELOP THE ALLOCATION FACTORS?
18	A.	The Average 12CP, MDD, and NCP were based on the Company's load research
19		data. The load research demands were developed from customers data that was
20		captured by Advanced Metering System ("AMS") meters used for billing purposes.
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1	Q25.	IN DEVELOPING THE ALLOCATION FACTORS, WHAT ADJUSTMENTS
2		WERE MADE TO THE ENERGY AND LOAD RESEARCH DEMAND DATA?
3	A.	In developing the allocation factors, several pro forma adjustments were made
4		consistent with the adjustments made with respect to developing present revenues,
5		which is discussed in the Direct Testimony of Company witness Crystal K. Elbe.
6		
7	Q26.	WERE ANY CUSTOMER TYPES EXCLUDED FOR THE EXTERNAL
8		ALLOCATION FACTORS?
9	А.	Yes. The load research data related to customers served under Legacy ELL Qualified
10		Facilities Standby Service ("QFSS"), Legacy EGSL Standby/Maintenance Service
11		("SMQ"), and Special Rate Contracts ("SRC") have been excluded. Schedules QFSS
12		and SMQ provide for standby service to customers with self-generation. The actual
13		usage of standby power is intermittent and difficult to predict. There may be a
14		significant amount of standby usage in one year, while another year may have an
15		insignificant amount. In fact, this same fluctuation often occurs from month to
16		month. SRCs are site-specific rates approved by the Commission. Accordingly,
17		Schedules QFSS, SMQ, and SRCs do not lend themselves to the traditional costing
18		logic employed by the Company with regard to standard rate schedules. They
19		therefore have been excluded for cost allocation purposes.
20 [°]		

Q27. WERE ADJUSTMENTS MADE TO THE ENERGY AND LOAD RESEARCH DEMAND DATA TO REFLECT NORMAL WEATHER?

A. Yes, the energy usage, CP demands, and MDD demands were adjusted to reflect normal weather. No weather adjustment was made to the NCP demands due to the variability of when the individual customer peak demand may occur and the inability to accurately reflect what effects weather may have on the individual customer peaks.

7 In addition to the weather adjustment, a year-end adjustment was made to the 8 monthly CP, MDD, and NCP demands to reflect the number of customers and their 9 related energy consumption at the end of the test year. The number of customers and 10 . their related usage were annualized based on the number of customers served under 11 each rate schedule during the last month of the test year. These year-end adjustments 12 were not made for customers in the lighting rate class or in rate classes where 13 individual pro forma adjustments were performed. This year-end customer adjustment 14 methodology has previously been used and accepted by the Commission.

15

16 Q28. WHY ARE THESE ADDITIONAL ADJUSTMENTS TO THE DEVELOPMENT17 OF THE ALLOCATION FACTORS APPROPRIATE?

A. The weather adjustment reduces the effect of extreme temperature variations on the
demand and energy usage of temperature sensitive classes of customers (e.g.,
Residential and General Service) in an attempt to "normalize" these customers'
demand and energy usage for the rate effective period. Proposed customer rates are
then developed based on a normal temperature range as opposed to being developed
based on an abnormally hot and/or cold year.

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2	Q29.	WERE DEMANDS AND ENERGY ADJUSTED FOR LINE AND
3		TRANSFORMATION LOSSES?
4	A.	Yes. The demands and energy have been adjusted for losses to the generation level.
5		The use of line and transformer losses to adjust demands and energy to the generation
6		level is needed to develop "like-type" demand and energy across all rate classes to
7		allocate costs.
8		
9	Q30.	PLEASE ELABORATE AS TO WHY IT IS NECESSARY TO ADJUST
10		DEMANDS AND ENERGY FOR LINE AND TRANSFORMATION LOSSES.
11	A.	Line and transformation losses for a customer taking service at the secondary voltage
12		level are much greater than for a customer taking service at the transmission voltage
13		level. The transmission service voltage customer usually takes service closer to the
14		generation source and/or has fewer transformation steps in the electrical delivery
15		process as compared to a secondary service voltage customer who usually takes
16		service at the very end of the electrical delivery process. This means a generator is
17		required to produce much more than one kilowatt ("kW") or one kWh in order to
18		deliver one kW and one kWh to a residential customer taking service at the secondary
19		level as compared to a customer taking service at the transmission voltage level.
20		If the Company allocated costs based on the actual metered kW and kWh
21		without the adjustment for losses, the allocation to secondary customers would under-

them to a greater degree than the allocation to transmission-level customers. This

represent the amounts of kW and kWh actually generated and transmitted to serve

would cause a cross-subsidization of cost from higher service voltage customers to
lower service voltage customers.
IN GENERAL, WHY IS IT APPROPRIATE TO MAKE THE VARIOUS
AFOREMENTIONED ADJUSTMENTS TO THE ALLOCATION FACTORS?
These adjustments were made to produce a normalized level of demand and energy
that will be representative of the rate effective year.
V. <u>RATE DESIGN</u>
A. Revenue Allocation
DESCRIBE THE RATE DESIGN PROCESS.
The rate design process relies on information from the CCOS Study to develop the
base rates that a utility requests that its regulator approve for billing customers for
service. The CCOS Study is a tool used to allocate the Total Retail Revenue
Requirement to each customer rate class based on a variety of factors that are based
on cost causation principles. While a regulator has discretion in the area of rate
design, the CCOS Study is generally used as a starting point or guide in the
development of rates. The development and results of ELL's CCOS Study are further
described by Mr. Barrilleaux.
WHAT IS COST CAUSATION?
Cost causation is the concept of determining what, or who, is causing costs to be
incurred by the utility. To the extent possible, the rate design process should consider
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1		cost causation, whereby each rate class's base rates collect the rate class's revenue
2		requirement identified within the CCOS Study. The concept of cost causation applies
3		to the rate structures as well. When rates are based on cost causation, the production,
4		transmission, and distribution capacity or demand-related costs are typically billed to
5		the rate classes through the kW-demand charge. Energy-related costs are recovered
6		through the kWh charge, and customer-related costs are recovered through the
7		monthly customer charge.
8		
9	Q34.	PLEASE DESCRIBE AT A HIGH LEVEL THE MAIN STEPS IN THE RATE
10		DESIGN PROCESS.
11	Α.	First and foremost, the objective of the rate design process is to develop base rates
12		that will collect revenues equal to the Total Retail Revenue Requirement. The base
13		rates are generally developed through two main steps. The first step begins with the
14		determination of revenue that should be collected from each customer rate class,
15		which I refer to as the revenue allocation process. The second step requires adjusting
16		the individual prices within the individual rate structures to collect the required
17		revenue by class as determined in the first step. The individual rate structure within
18		each rate class is generally based on a combination of billing components that
19		typically include a fixed customer charge (\$ per month), an energy charge (\$ per
20		kWh), and a demand charge (\$ per kW). I will describe ELL's proposed revenue
21		allocation process, and Ms. Elbe supports the second step of the rate design process.
22		

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Q35. WHAT ARE SOME CONSIDERATIONS IN THE REVENUE ALLOCATION PROCESS?

3 A. A primary consideration in the revenue allocation process, from the Company's 4 perspective, is to set each rate class's revenue as close as possible to its revenue 5 requirement (that is, its cost to serve), as identified by the CCOS Study. Other 6 considerations in the revenue allocation process include rate stability and rate 7 impacts, both of which are important to customers. For example, the CCOS Study 8 may indicate that some classes should receive a significant increase in rates that may 9 be very different than the increase for the total utility. In these cases, it may be 10 reasonable to moderate the increase for those particular classes in order to maintain a 11 certain level of stability and avoid rate shock to customers. While some of these 12 considerations can be conflicting, when customer effects are considered, I believe the 13 Company's proposed revenue allocation, which I discuss further below, is a just and 14 reasonable proposal.

15

Q36. HAS THE COMPANY PROPOSED TO DEPART FROM STRICT RELIANCE ON THE CCOS STUDY?

A. Yes. ELL is not proposing to set the revenue to be recovered from each rate class
based solely on the results of the CCOS Study. Before making that determination,
ELL considered the data in Table 5 below, which shows a revenue allocation by rate
class based on the CCOS Study. Table 5 considers *all* revenues as part of the revenue
allocation process, including base rate revenues, fuel revenues, and continuing rider
revenues. In particular, column (b) of Table 5 shows the present revenues from each

1	customer group; column (c) shows the total revenues projected by the CCOS Study,
2 -	including all other revenues as discussed above; column (d) shows the increase or
3	decrease between present revenues and the revenues projected by the CCOS Study;
4	and column (e) shows the net percentage change in revenues projected by the CCOS
5	Study from present revenues.

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Table 5 **Class Cost of Service Allocation (\$000)**

Line No.	Rate Class	Total Present Revenues	CCOS Study Revenues	Change in Revenues	Percent Change
	(a)	(b)	(c)	(d)	(e)
1	Residential Service	\$2,009,379	\$2,276,189	\$266,811	13.3%
2	Small General Service	\$966,705	\$900,503	(\$66,202)	6.8%
3	General Service	\$668,946	\$704,009	\$35,063	໌ 5.2%
4	Municipal Pumping Service	\$31,900	\$35,375	\$3,474	10.9%
5	Large Power Service	\$347,691	\$354,625	\$6,934	2.0%
6	High Load Factor Service	\$469,681	\$493,396	\$23,715	5.0%
7	Large Load High Load Factor Service	\$1,083,550	\$1,256,203	\$172,652	15.9%
8	Legacy Industrial Service	\$147,997	\$191,036	\$43,039	29.1%
9	Large Industrial Service	\$264,910	\$259,015	(\$5,895)	-2.2%
10	Lighting Service	\$106,135	\$73,987	(\$32,148)	-30.3%
11	Total Revenue	\$6,096,894	\$6,544,337	\$447,443	7.3%

9

8 A revenue allocation based solely on the CCOS Study, as shown in Table 5, reveals disparities between the level of allocated costs by class and the current 10 amount each customer class pays towards those costs. From a Total Revenue 11 perspective, the CCOS Study results in a 7.3% overall revenue increase for the 12 Company as shown in Table 5 column (e), row 11. When looking at the results on a 13 more granular level, the CCOS Study indicates that seven of the ten customer rate 14 classes currently contribute less than their respective revenue requirements. If each 15 class's revenue is set at the revenue requirement level identified by the CCOS Study,

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1		several classes would experience increases while other classes would experience
2		decreases. For example, the Residential Service class would experience a 13.3%
3		revenue increase, but the Small General Service class would experience a 6.8%
4		revenue decrease, which would be inconsistent with the overall revenue increase
5		sought by ELL. As a result of such disparities, ELL is proposing to rebalance the
6		revenue responsibility among rate classes in a manner that is informed by the CCOS
7		Study but does not strictly adhere to its results.
8		
9	Q37.	WHAT IS ELL'S REVENUE ALLOCATION PROPOSAL?
10	Α.	ELL is proposing that no class receive a rate decrease given that the overall utility
11		will experience an increase. ELL proposes to redistribute the revenue above the level
12		identified in the CCOS Study from the Small General Service, Large Industrial
13		Service, and Lighting Service rate classes to those customer classes that, under the
14		CCOS Study, would receive an increase greater than the overall revenue increase
15		average of 7.3% so that each rate class receive an equal percentage increase in total
16		revenue, excluding the Legacy Industrial Service class, which will be set at the CCOS
17		Study level. The proposed revenue allocation would result in the Residential Service,
18		Municipal Pumping Service, and Large Load High Load Factor Service classes
19		receiving a 10.8% increase in total revenues. Table 6 below shows the change in
20		revenues by class based on ELL's Total Proposed Revenue allocation.

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Table 6Total Proposed Revenue Allocation (\$000)

		Total	Total			
Line		Present	Proposed	Change in	Percent	
No.	Rate Class	Revenues	Revenues	<u>Revenues</u>	Change	
	(a)	(b)	(c)	(d)	(e)	
1	Residential Service	\$2,009,379	\$2,227,170	\$217,791	10.8%	
2	Small General Service	\$966,705	\$966,705	\$0	0.0%	
3	General Service	\$668,946	\$704,009	\$35,063	5.2%	
4	Municipal Pumping Service	\$31,900	\$35,358	\$3,458	10.8%	
5	Large Power Service	\$347,691	\$354,625	\$6,934	2.0%	
6	High Load Factor Service	\$469,681	\$493,396	\$23,715	5.0%	
7	Large Load High Load Factor Service	\$1,083,550	\$1,200,994	\$117,443	10.8%	
8	Legacy Industrial Service	\$147,997	\$191,036	\$43,039	29.1%	
9	Large Industrial Service	\$264,910	\$264,910	\$0	0.0%	
10	Lighting Service	\$106,135	\$106,135	\$0	0.0%	
11	Total Revenue	\$6,096,894	\$6,544,337	\$447,443	7.3%	

In comparing Tables 5 and 6, the Total Revenue in row 11 is the same in both tables. That is because row 11 shows the total dollars at the Company level, and the revenue allocation process is revenue neutral to the Company. In other words, the revenue allocation process changes the revenue responsibility among the classes but does not impact the Company's overall revenue requirement.

8 General Service, Large Power Service, High Load Factor Service, and Legacy 9 Industrial Service classes are not changed as compared to Table 5. However, there 10 are differences in the results for the remaining six customer classes in columns (c) 11 through (e). As described above, total revenues in column (c) for three customer 12 classes (Small General Service, Large Industrial Service, and Lighting Service) are 13 reset to match the current level in column (b), and that difference is applied to reduce 14 the revenue increases to equal percentages for the other three customer classes to 15 recover the Total Revenues in row 11 for the Company.

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1 Figure 1 below depicts the contribution percentage that each class pays 2 towards its cost to serve (i.e., the unadjusted results by class of the CCOS Study as 3 shown in Table 5) based on both present and proposed revenues. Moreover, Figure 1 4 depicts the ratio, by class, of the current revenue contributed towards the cost to serve (Present) and the ratio of the proposed revenues and the cost to serve each class 5 6 (Proposed). For example, as shown in Table 5, the Residential class's present 7 revenues are \$2.009 billion, and the CCOS Study revenue requirement is \$2.276 8 billion, which results in the Residential class contributing 88% towards its cost to 9 serve. After the proposed revenue allocation as shown in Table 6, the Residential 10 class's proposed revenue is \$2.227 billion, which results in the Residential class 11 contributing 98% towards its cost to serve.



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Q38. PLEASE SUMMARIZE THE REASONS SUPPORTING THE TOTAL PROPOSED 1 2 **REVENUES ALLOCATION BY CLASS.** 3 A. ELL's proposal departs from the CCOS Study while moving the classes closer to 4 their respective costs of service. The proposal mitigates the disproportionate effects 5 on certain classes of customers and rebalances the current relative cost burdens to 6 arrive at a reasonable revenue amount to be recovered from each rate class. 7 8 **B.** Proposed Changes to Rate Schedules 9 Q39. PLEASE EXPLAIN HOW THE COMPANY DEVELOPED THE PROPOSED 10 RATE SCHEDULES AND RECOMMENDED RATE STRUCTURES. 11 For residential customers, ELL has adopted the current Legacy EGSL residential rate A. 12 schedule and its current rate structure for all residential customers. For commercial 13 and industrial customers, they will remain on their currently available rate schedules. 14 In general, and where appropriate, the customer charge, demand charges, and 15 energy charges in the various rate schedules were adjusted to produce the base rate 16 revenue allocated to each rate class, and these changes are supported by Ms. Elbe. In 17 addition, to reduce the difference between the various legacy general service rates, the 18 Legacy EGSL small general service and general services rate were increased slightly 19 more than the Legacy ELL rates. The changes to existing rates are consistent with the 20 objectives of providing rates that are cost-based, send appropriate price signals, and 21 are understandable to customers. 22

1 Q40. PLEASE EXPLAIN IN MORE DETAIL HOW THE LEGACY SMALL GENERAL

2 SERVICE AND GENERAL SERVICE RATES WERE ADJUSTED.

3 Α. Legacy rates were changed to achieve the overall rate class change for the small 4 general service and general service rate classes. Historically, Legacy EGSL rates 5 generally result in lower bills when compared to Legacy ELL rates. Due to this 6 differential, fully combing Legacy ELL rates and Legacy EGSL rates would result in 7 a Legacy ELL customer receiving a significant decrease and a Legacy EGSL 8 customer receiving a significant increase. To reduce this difference and bring the 9 Legacy ELL rates closer to the Legacy EGSL rates, the Company set the change in 10 rates for the Legacy EGSL rate schedules (i.e., SGS-G and GS-G) slightly higher than 11 their respective rate class's overall change in rates, and the Legacy ELL rate 12 schedules (*i.e.*, GS-L and LGS-L) were set slightly lower than their respective rate 13 class's overall change in rates. With this small adjustment, plus the different changes 14 in rates for the small general service and general service rate classes shown in Table 6 15 above, the differential that currently exists between the general service legacy rates 16 should be reduced.

17

18 Q41. WHAT ARE THE CHANGES THE COMPANY PROPOSES FOR THE19 RESIDENTIAL RATE STRUCTURE?

A. The Company currently has two separate residential rate schedules: one for the Legacy ELL residential customers ("Rate RS-L"), and another for Legacy EGSL residential customers ("Rate RS-G"). The Company is now proposing to combine those two legacy rate schedules, Rate RS-L and Rate RS-G, into a single residential

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1		rate schedule, Rate RS. All ELL residential customers will be served under the new
2		rate schedule. The new rate schedule, Rate RS, is based on the Rate RS-G, which has
3		a customer charge component and a flat energy rate component.
4		
5	Q42.	WHAT WERE THE MAJOR OBJECTIVES IN COMBINING THE RESIDENTIAL
6		RATE SCHEDULES?
7	A.	In developing the combined residential rate schedule, due consideration was given to
8		the following two objectives: (1) that the new rate recovers the overall proposed
9		Residential rate class revenue; and (2) that the customer charge recovers the fixed,
10		customer-related costs as measured by the unit cost analyses. Ms. Ingram describes
11		other more customer-focused benefits and objectives of combining the residential rate
12		schedules.
13		
14	Q43.	WHAT ARE UNIT COSTS?
15	A.	Unit costs are derived from the functionalized (i.e., production, transmission, and
16		distribution) and classified (i.e., customer, energy, and demand) cost components in
17		the CCOS Study. The CCOS Study provides the allocated revenue requirement for
18		each customer class, whereas the unit cost analyses further divide each rate class's
19		allocated revenue requirement into the various functionalized and/or classified costs
20		components. The customer-related unit cost is the customer-related revenue
21		requirement component for each rate class divided by the associated billing units for
22		the class (i.e., number of customer bills). Based on the unit cost analyses in this case,
23		the average customer-related costs per residential customer bill is \$13.01 per month.

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- 1 Q44. WHAT IS THE PURPOSE OF A CUSTOMER CHARGE?
- A. The purpose of a customer charge is to recover customer-related costs that are
 incurred by the utility even if the customer does not consume energy.
- 4

5 Q45. CAN YOU EXPLAIN THE PRINCIPLES SUPPORTING A FIXED CUSTOMER 6 CHARGE?

7 A. In general, rate design should be based on the principle of cost causation – that is, a 8 customer should pay for the costs the customer causes. Under this principle, the 9 customer charge thus should be set at a level to ensure that all customer-related costs 10 identified in the unit cost analyses are recovered from each customer on an equal 11 basis. Also, customer-related costs are not correlated to the number of kilowatt hours 12 of electricity used by the customer; in other words, regardless of whether a customer 13 uses more or less electricity, the customer-related cost amount remains unchanged. 14 Thus, under the principle of cost causation, the customer charge should be fixed.

15

16 Q46. ARE THERE ANY BENEFITS TO HAVING A FIXED CUSTOMER CHARGE?

17 A. Yes, there are benefits to the customer and the Company. To the extent those 18 customer-related costs are recovered via a fixed customer charge, it provides a level 19 of monthly rate and revenue stability not achieved when fixed costs are collected 20 through a variable charge such as the energy charge. Similarly, a customer charge 21 stabilizes residential customer bills because a smaller share of costs varies as a result 22 of uncontrollable factors affecting usage such as weather.

23

Q47. CAN YOU PROVIDE AN EXAMPLE OF THE TYPE OF EXPENSES THAT ARE INCLUDED IN A CUSTOMER CHARGE?

3 A customer charge based on the unit cost analyses would include all customer-related A. 4 costs identified within the CCOS Study, such as costs associated with meters and bill 5 preparation. In addition to those costs that are allocated directly as customer-related, 6 the customer charge would include other customer-related costs allocated within the 7 CCOS Study. For example, general and intangible plant costs are allocated with 8 various internal factors that may have a customer-related component, and that 9 customer-related portion is embedded in the customer-related costs of the unit costs 10 analyses.

11

12 Q48. DO THE CURRENT LEGACY RESIDENTIAL BASE RATE SCHEDULES13 INCLUDE A MONTHLY CUSTOMER CHARGE?

A. Only one of the two existing residential base rate schedules (Rate RS-G) includes a
monthly customer charge.

16

17 Q49. WHAT IS THE RESIDENTIAL CUSTOMER CHARGE THE COMPANY IS18 REQUESTING IN THIS DOCKET?

A. The Company is proposing a residential customer charge of \$12.00 per month, which
reflects 92% of the full residential customer-related costs resulting from the unit cost
analyses. While the Company supports a rate design in which the customer charge
recovers the full amount of customer-related costs identified by the unit cost analyses,
it is not proposing that in this case because the Company also recognizes, among

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1		other things, the importance of gradualism. The incremental change in the customer
2		charge proposed by the Company provides for gradualism while also moving towards
3		a customer charge that reflects the full customer-related cost.
4		
5	Q50.	DOES THE PROPOSED CUSTOMER CHARGE AFFECT THE AMOUNT OF
6		REVENUE ELL IS SEEKING TO RECOVER FROM THE RESIDENTIAL RATE
7		CLASS?
8	A.	No. ELL's customer charge proposal only impacts how the Residential rate class
9		revenue requirement is collected from residential customers. As indicated in Table 6
10		above, ELL proposes to recover \$2.227 billion from the Residential rate class. That
11		proposal will not change as a result of the proposed customer charge. The only
12		question presented by the customer charge is whether each residential customer
13		should pay a customer charge that more closely reflects the full customer-related
14		costs that the customer causes via a fixed monthly charge or whether a greater portion
15		of those customer-related costs should be recovered through energy charges.
16		ć
17	Q51.	IS ELL'S PROPOSED \$12.00 CUSTOMER CHARGE REASONABLE?
18	A.	Yes. ELL's proposed \$12.00 monthly customer charge is set at a reasonable level
19		that moves the residential customer charge toward the full level of customer-related
20		fixed costs to serve those customers while respecting the principle of gradualism,
21		improves bill stability for residential customers, and improves revenue stability for
22		ELL.
23		

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Q52. DOES THE PROPOSED RESIDENTIAL RATE INCLUDING A CUSTOMER CHARGE PROVIDE MORE ACCURATE PRICING?

3 A. Yes. The proposed residential rate, which includes a customer charge set at 92% of 4 the full level identified by the unit cost analyses noted above, will provide more 5 accurate pricing, thus sending residential customers a more appropriate price signal 6 upon which to base decisions regarding their energy needs and maximizing the 7 economic benefits to all customers. As technology continues to improve, it will 8 become increasingly important to have accurate pricing to ensure that the economic 9 value of options is not distorted simply because electric service pricing and costs may 10 not be aligned due to outdated rate structures.

11

Q53. DO VARIOUS OTHER UTILITIES ACROSS THE UNITED STATES AND THOSE SUBJECT TO THE JURISDICTION OF THE LPSC HAVE A FIXED RESIDENTIAL CUSTOMER CHARGE?

15 A. Yes, other utilities across the United States have fixed residential customer charges, 16 and many have requested increases in their fixed charges in recent years, with several 17 utilities receiving approval from regulators. Although the determination of the 18 appropriate level of residential customer charges should be a utility-specific exercise, 19 it is notable that every LPSC-jurisdictional utility, with the exception of Legacy ELL, 20 has a fixed monthly residential customer charge, and the majority of other customer 21 charges assessed by other LPSC-jurisdictional utilities range from \$8 to \$12 per 22 month. While many of those customer charge rates have not been modified in many

1 years, several LPSC-jurisdictional utilities have received approval to increase their

2

respective customer charges in the last few years, as noted in Table 7.⁷

3

Table 7	Table 7	
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Utility	Previous Customer Charge	Current Customer Charge		
DEMCO	\$10.00	\$12.00		
JDEC	\$8.00	\$12.00		
SLECA	\$5.37	\$9.00		
SWEPCO	\$5.49	\$7.43		
WST	\$9.00	\$12.00		

4

5 Q54. HOW DID THE COMPANY DEVELOP THE ENERGY CHARGES FOR THE 6 PROPOSED COMBINED RESIDENTIAL RATE SCHEDULE?

A. After determining the amount of revenue that would be recovered through the \$12.00
customer charge, the energy charges were then derived by dividing the remaining
proposed revenue by the expected energy billing determinants. This ensures that the
proposed rates will adequately recover the revenue allocable to the residential class.
Table 8 below provides a comparison of Rate RS-G and Rate RS-L to proposed Rate
RS. Table 8 includes the current base rate and the current base rate with the current
Formula Rate Plan ("FRP") rider adjustment that is being rolled into base rates. This

⁷ For DEMCO, see Rate Schedule A effective December 29, 2020, by LPSC Order No. U-35359. For Jefferson Davis, see Rate Schedule A effective October 12, 2018, by LPSC Order No. U-34676, *In re: Application for Approval of Formula Rate Plan and Initial Revenue Adjustment*. For SLECA, see Rate Schedule A effective March 7, 2018, by LPSC Order No. U-34483, *In re: Application for Approval of an Increase in Retail Rates*, dated March 7, 2018. For SWEPCO, see Rate Schedule RS effective January 31, 2023, by LPSC Order No. U-35441. For WST, see Rate Schedule A-5 effective May 5, 2023, by LPSC Order U-36399.

- 1 is provided to show what each rate class is effectively paying today when the base
 - rate and FRP rate adjustment are combined.
- 2

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Table 8RATE RS COMPARISON TO EXISTING LEGACY RATE STRUCTURES

Rate Structure	Rate RS-G		Rate RS-L		New Rate
Component					RS
	Base	Base	Base	Base	Base
	Rate	Rate	Rate	Rate	Rate
		+FRP		+FRP	
Customer Charge	\$4.46	\$8.31	N/A	N/A	\$12.00
Energy Charge			-		
All kWh	\$0.04092	\$0.07624			\$0.09477
Summer kWh			\$0.04779	\$0.09150	
1st 800 Winter kWh			\$0.04779	\$0.09150	
> 800 Winter kWh			\$0.03709	\$0.07102	
Minimum Bill8	N/A	N/A	\$7.04	\$13.48	N/A

⁸ A minimum bill differs from a fixed customer charge. A minimum bill provision provides a specific threshold dollar value that a customer will pay to the utility for each billing period and would only apply during a billing period when energy usage is very low. By contrast, a customer charge is used to recover a portion of a utility's fixed costs, and it does not vary with a customer's usage.

1 Q55. HAS ELL PROVIDED TYPICAL BILLS REFLECTING THE IMPACT OF THE 2 COMPANY'S PROPOSED REVENUE INCREASE AND CHANGES IN RATE 3 **DESIGN?** 4 A. Yes. Typical bills are provided by Ms. Elbe. There are differing bill impacts among 5 the Legacy ELL and Legacy EGSL residential customers. The difference is a 6 function of the Legacy ELL residential customers having somewhat higher bills prior 7 to the combination of rates than similarly situated Legacy EGSL residential 8 customers. Putting aside the billing impacts of certain riders, ELL's proposed 9 combined rate design is intended to eliminate this disparity. The proposed bills also differ because ELL is not proposing to combine the existing securitization related 10 11 riders. 12 13 、 VI. **CONCLUSION**

- 14 Q56. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 15 A. Yes, at this time.

AFFIDAVIT

STATE OF LOUISIANA

PARISH OF ORLEANS

NOW BEFORE ME, the undersigned authority, personally came and appeared, MATTHEW S. KLUCHER, who after being duly sworn by me, did depose and say:

That the above and foregoing is his sworn testimony in this proceeding and that he knows the contents thereof, that the same are true as stated, except as to matters and things, if any, stated on information and belief, and that as to those matters and things, he verily believes them to be true.

1/uch Matthew

SWORN TO AND SUBSCRIBED BEFORE ME THIS 28^{4} DAY OF AUGUST 2023

FARY PUBLIC My commission expires:

HARRY M. BARTON Notary Public for the State of Louisiana LA Bar No. 29751 - Notary ID 90845 Commission Issued For Life



Testimony:

Electric Rate Cases

- 1. Rebuttal and Rejoinder Testimony (2019). Docket No. UD-18-07 (Entergy New Orleans, LLC). Change in Electric and Gas Rates. On behalf of Entergy New Orleans, LLC. Issues: class cost of service.
- Direct, Sur-rebuttal, and Settlement Testimony (2017). Docket No. 16-052-U (Oklahoma Gas and Electric Company). General Change in Rates, Charges, and Tariffs. On behalf of the general Staff of the APSC. Issues: class cost of service, revenue distribution, rate design, customer charges, and customer bill impacts.
- 3. Settlement Testimony (2016). Docket No. 15-015-U (Entergy Arkansas, Inc.). Change in Rates for Retail Electric Service. On behalf of the general Staff of the APSC. Issues: forecasted billing determinants and revenues, class cost of service, revenue distribution, rate design, customer charges, and customer bill impacts.
- 4. Settlement Testimony (2014). Docket No. 13-111-U (The Empire District Electric Company). Change in Rates and Tariffs. On behalf of the general Staff of the APSC. Issues: forecasted billing determinants and revenues, class cost of service, revenue distribution, rate design, and customer bill impacts.
- 5. Direct and Sur-rebuttal Testimony (2013). Docket No. 13-028-U (Entergy Arkansas, Inc.). Change in Rates for Retail Electric Service. On behalf of the general Staff of the APSC. Issues: class cost of service and revenue distribution.

Natural Gas Rate Cases

- Settlement Testimony (2016). Docket No. 15-098-U (CenterPoint Energy Arkansas Gas). General Change or Modification in its Rates, Charges, and Tariffs. On behalf of the general Staff of the APSC. Issues: forecasted billing determinants and revenues, class cost of service, revenue distribution, rate design, customer charges, and customer bill impacts.
- Settlement Testimony (2014). Docket No. 13-079-U (Sourcegas Arkansas, Inc.). General Change in Rates and Tariffs. On behalf of the general Staff of the APSC. Issues: forecasted billing determinants and revenues, class cost of service, revenue distribution, rate design, and customer charges.

Water Rate Cases

1. Direct and Sur-rebuttal Testimony (2010). Docket No. 09-130-U (United Water Arkansas, Inc.). General Change in Rates and Tariffs. On behalf of the General Staff of the APSC. Issues: forecasted billing determinants and revenues.

Energy Efficiency Testimony

Various energy efficiency testimonies in Docket No.'s: 13-002-U, 10-100-R, 08-072-TF, 07-085-TF, 07-083-TF, 07-082-TF, 07-81-TF, 07-079-TF, 07-078-TF, 07-077-TF, 07-076-TF, 07-075-TF.

Various Self-Direct testimonies in Docket No.'s: 11-137-SD, 11-136-SD, 11-131-SD, 11-126-SD, 11-125-SD, 11-124-SD, 11-123-SD, 11-120-SD, 11-118-SD, 11-111-SD, 11-109-SD, 11-104-SD, 11-101-SD, 11-095-SD, 11-093-SD.

Advanced Metering Infrastructure Testimony

 Compliance and Sur-rebuttal Testimony (2020). Docket No. 16-060-U (Entergy Arkansas, LLC). Application for an Order Finding the Deployment of Advanced Metering Infrastructure to be in the Public Interest. On behalf of Entergy Arkansas, LLC. Issue: Residential Peak Time Rebate Pilot offering.

<u>Other</u>

 Compliance, Direct, Rebuttal, and Supplement Testimony (2021). Docket No. 16-036-FR (Entergy Arkansas, LLC). The Formula Rate Plan Filing. On behalf of Entergy Arkansas, LLC. Issue: FRP Rate Calculation.

:

- 2. Compliance Testimony (2021). Docket No. 18-004-TF. Proposed tariff revisions regarding the Formula Rate Plan Rider.
- 3. Direct Testimony (2022). Docket No. 21-080-C. Minimum billing applications and billing procedures.
- 4. Direct Testimony (2022). Docket No. 21-113-P (Entergy Arkansas, LLC). Approval to engage in a Promotional Practice.
- 5. Various Net-Metering Application testimonies in Docket No.'s: 21-099-U, 21-042-U, 20-062-U, 20-047-U, 20-036-U, 20-032-U, 20-019-U, 20-018-U, 20-016-U, 20-015-U, 20-013-U, 20-007-U.
- 6. Direct Testimony (2022). Docket No. 22-032-TF. Large power high-load density
- 7. Direct, Rebuttal, and Sur-Surrebuttal Testimony (2022-2023). Docket No. 22-061-U. Potential cost shifting associated with Net Metering.
- 8. Direct Testimony (2023). Docket No. 22-027-P. Proposed Tariff regarding demand adjustment.