EXHIBIT JAS-1 TESTIMONY JASON STRONG

Jefferson Davis Electric Cooperative, Inc. Prefiled Direct Testimony of Jason A. Strong (JAS-1) LPSC Docket No. May 31, 2024 Page 1 of 28

# **BEFORE THE PUBLIC SERVICE COMMISSION**

## OF THE STATE OF LOUISIANA

LPSC Docket No.

Application of Jefferson Davis Electric Cooperative, Inc.	)
(JDEC) requesting approval of Initial Revenue Adjustment,	)
approval of Formula Rate Plan, continuation and modification	)
of Storm Rider, modification to Tariff, and request for	)
Interim Rate Relief pursuant to	)

## PREFILED DIRECT TESTIMONY OF JASON A. STRONG ON BEHALF OF JEFERSON DAVIS ELECTRIC COOPERATIVE, INC.

### May 31, 2024

### Summary of Testimony

Mr. Strong's prefiled direct testimony supports Jefferson Davis Electric Cooperative, Inc.'s (JDEC) proposed initial revenue adjustment and associated rate changes, modifications to tariff and request for interim rate relief based on the adjusted test year ended December 31, 2023. Mr. Strong sponsors the following Exhibits:

Exhibit C – Cost of Service Study

Exhibit D-Revenue Calculations

Exhibit E – Summary of Rate Changes

Exhibit F – Typical Bill Calculations

Exhibit I – Existing Rate Schedules

Exhibit J – Proposed Rate Schedules

Exhibit JAS-2: Curriculum Vitae

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## PREFILED DIRECT TESTIMONY OF JASON A. STRONG

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1		I. INTRODUCTION AND STATEMENT OF QUALIFICATIONS
2	Q.	Please state your name and business address?
3	А.	My name is Jason A. Strong. My business address is 20701 Cooperative Way, Dulles,
4		VA 20166.
5	Q.	What is your present occupation?
6	А.	I am employed as the Vice President of Utility Pricing, Policy & Analytics at the
7		National Rural Utilities Cooperative Finance Corporation (CFC). I have been employed
8		by CFC since 2017 as outlined in Exhibit JAS-2: Curriculum Vitae.
9	Q.	What is CFC?
10	А.	CFC was incorporated as a private, not-for-profit cooperative association under the laws
11		of the District of Columbia in April 1969. The principal purpose of CFC is to provide its
12		members with a dependable source of low cost capital and state-of-the-art financial
13		products and services. CFC provides its members with a source of financing to
14		supplement the loan programs from the Rural Utilities Service (RUS) of the United States
15		Department of Agriculture. CFC will also lend 100% of the loan requirement for those
16		members electing not to borrow from the RUS. CFC is owned by and makes loans
17		primarily to its rural utility system members to enable them to acquire, construct and
18		operate electric distribution, generation, transmission and related facilities, as well as
19		access to emergency lines of credit so power can be restored quickly after natural

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1		disasters. CFC has approximately 900 members, including 831 distribution and 62
2		generation and transmission cooperatives operating in 49 states and four U.S. territories. <sup>1</sup>
3	Q.	What are your duties in your current position?
4	А.	I lead and direct a staff of electric utility consultants and analysts providing electric utility
5		rate-making, policy, economic and advisory consulting services, at the federal and state
6		level, to member-electric cooperatives. I am responsible for leading the team in
7		providing member-cooperatives with expertise in areas surrounding the general
8		regulatory and rate-making process, and specific to certain technical requirements
9		including regulatory accounting, rate of return and cost-of-capital, revenue requirement
10		determinations, cost-of-service, wholesale and retail rate design, tariff and rate
11		administration, and econometric modeling and advanced data analytics. In addition, I
12		advise CFC and its members on nascent energy industry economic and legal trends.
13		Since being employed by CFC, I have conducted or supervised over 400 regulatory
14		engagements for electric cooperative members. I have been instrumental in rate design
15		efforts and have worked with member-cooperatives in emerging areas in designing
16		residential demand charges, electric vehicle charging, and energy and demand time-of-
17		use rates. I am also responsible for certain member engagements requiring assistance
18		with regulatory issues before the Federal Energy Regulatory Commission (FERC) and
19		state regulatory commissions in instances where those electric cooperatives are subject to
20		such regulation.

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<sup>&</sup>lt;sup>1</sup> JDEC is a member of CFC and has long- and short-term loans from CFC totaling approximately \$202,880,995 outstanding as of December 31, 2023.

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1	Q.	Please describe your educational background.
2	А.	I received the degree of Bachelor of Science in Economics from Illinois State University,
3		Normal, Illinois, in May 2000. I also received the degree of Master of Science in
4		Applied Economics with a Sequence in Electricity, Natural Gas and Telecommunications
5		Economics from Illinois State University in December 2004.
6	Q.	Please describe your professional experience?
7	A.	I have over 20 years of experience in the electric utility industry in economic, rate and
8		regulatory-related matters. As described above, I currently lead a team providing federal
9		and state regulatory expertise and solutions to CFC members and internal stakeholders. I
10		provide rate design and cost-of-service, regulatory, economic and advisory consulting
11		services, and direct staff members in also performing these functions for our membership.
12		Additionally, I advise CFC and its members on emerging energy industry and regulatory
13		initiatives.
14		Prior to joining CFC in 2017, I was employed by the FERC from 2005 through 2016 as
15		an Economist in the Office of Energy Market Regulation, formerly the Office of Markets,
16		Tariffs and Rates. During my tenure at the FERC, I led and directed inter-disciplinary
17		teams in efforts concerning Commission regulations and policies and advised the
18		Chairman, Commissioners and key-decision makers in matters involving rate design and
19		cost-of-service, cost allocation methods, regional transmission organization auctions,
20		capacity markets, transmission planning processes, and integration of diverse energy
21		sources and new emerging technologies into the marketplace. I was instrumental in
22		leading Order No. 890 and Order No. 1000 transmission planning compliance efforts.

1		During my tenure with the FERC, I prepared or supervised the preparation of FERC
2		orders recommending acceptance, rejection, deficiency, or investigation in hundreds of
3		cases in matters concerning open access transmission service and FERC's Order Nos.
4		888, 889, 890, 2000 and 679 and other FERC accounting guidance and rulemakings.
5		Lastly, I was a subject matter expert for FERC litigators defending FERC orders on
6		appeal before the U.S. Court of Appeals. Prior to FERC, I worked for Exclon
7		Corporation in the Energy Acquisition Division in 2004. A more comprehensive history
8		of my experience is contained in JAS-2: Curriculum Vitae.
9	Q.	Please summarize your experience testifying before regulatory bodies and courts on
10		utility-related matters.
11	А.	During my tenure at the FERC, I was assigned to the Commission's advisory staff and,
12		therefore, was precluded from testifying in evidentiary proceedings before FERC
13		Administrative Law Judges. However, while at the FERC, I presented cases publicly to
14		the FERC Commissioners at their monthly public meetings and was the technical contact
15		for the Commission in numerous cases. I also spoke to the media on numerous occasions
16		and led several technical conferences and proceedings. During my tenure at CFC, I have
17		represented and/or am presently preparing to represent numerous electric utility members
18		before several state regulatory commissions regarding, among other things, revenue
19		requirements, rate of return, cost of service studies and design of electric tariff rates.
20	Q.	Have you conducted cost of service studies and developed rates for electric
21		cooperatives?

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1	А.	Yes, since being employed by CFC, I have conducted or supervised over 400 regulatory
2		engagements for electric cooperative members including, among other areas of
3		consultancy, revenue requirement studies, cost of service studies and rate design. In
4		addition to conducting and reviewing cost of service studies, I've been instrumental in
5		leading rate design efforts and have worked with member-cooperatives in emerging areas
6		in designing residential demand charges, electric vehicle charging, and energy and
7		demand time-of-use rates.
8		II. PURPOSE OF TESTIMONY
9	Q.	For whom are you testifying?
10	А.	I am testifying on behalf of JDEC.
11	Q.	What is the purpose of your testimony?
12	А.	The purpose of my testimony is to explain and support the Exhibits to implement the rate
13		increase and associated rate changes for the adjusted test year ending December 31, 2023,
14		including the embedded cost of service study. Witness Paul E. DeChario sponsors
15		certain Exhibits in support of the overall requested rate increase, Formula Rate Plan and
16		modifications to the Storm Rider. Witness Michael J. Heinen provides overall testimony
17		supporting the rate application and outlining the justification and policy drivers behind
18		certain elements of the rate increase and rate design proposal. The JDEC Board of
19		Directors determined it was necessary to seek a rate adjustment at its meeting on May 16,
20		2024 and approved the instant filing and supporting Exhibits.
21	Q.	Please describe the organization of your Direct Testimony.

1	А.	First I will discuss the purpose of developing embedded cost of service studies and the
2		goals that are sought through these analyses. I will also outline the basic processes
3		involved in developing a cost of service study.
4		Next I will describe the cost of service study, included in the instant filing in Exhibit C-
5		Cost of Service Study, in which JDEC electric utility system costs are allocated and
6		assigned to JDEC's various customer classes.
7		Last, I outline the mechanics of the proposed rate design and impact of those rates on
8		JDEC membership.
9	Q.	Were the Exhibits prepared by you or under your direction?
10	А.	Yes.
11	Q.	What test year and revenue requirement is utilized in your analysis?
12	А.	The test year is the adjusted 12 months ending December 31, 2023 as presented and
13		supported by Witness Paul E. DeChario in Exhibit A – Cash Requirement Study and
14		Exhibit B – Adjustments.
15	Q.	What were the sources of your data and information used in developing the Exhibits
16		you are sponsoring?
17	А.	JDEC supplied the data, information and adjustments.
18		III. COST OF SERVICE STUDY (COSS)
19	Q.	In which states has CFC used its cost of service study model?
20	A.	CFC's cost of service study model has been utilized for consulting engagements for
21		hundreds of cooperatives across 41 states. In addition, CFC has utilized its cost of
22		service study model in rate cases before regulatory commissions in several states,

1		including Kansas, Kentucky, Pennsylvania, Wyoming, Vermont, and Virginia. CFC's
2		cost of service study model has also been submitted before FERC.
3	Q.	Please summarize the purpose of performing embedded cost of service analyses.
4	A.	Cost of service analyses are conducted to assign and allocate electric utility rate base,
5		operating expenses and return (margins) to its customer classes based upon the principle
6		of cost causation. Elements of a cost of service are directly assigned when cost causation
7		is traceable to a particular jurisdiction or customer class. Costs that are not directly
8		assigned are allocated in a manner that reflects how the costs are incurred by the electric
9		utility on the basis of cost causation.
10	Q.	What is the primary objective of the cost of service study you are presenting?
11	А.	The primary objective of a cost of service study is to present a reasonable representation
12		of an electric utility's costs during the test period among its customer classes. The cost of
13		service study included as Exhibit B – Cost of Service Study provides JDEC's' rates of
14		return for its operations for each of its customer classes during the test period. These
15		rates of return serve as an important guide in the assessment of the customer class to an
16		electric utility's overall earned rate of return and in the apportionment of necessary
17		revenue changes in rate design.
18	Q.	Please summarize the key processes involved in the cost of service study analysis.
19	А.	Three basic steps are required to properly apportion rate base, operating expenses and
20		return (margins) responsibilities to customer classes by: (1) functionalization; (2)
21		classification; and (3) allocation.
22	Q.	Please generally describe cost functionalization.

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1	A.	The functionalization of costs is the process of dividing rate base and operating expense
2		elements of the cost of service into functional categories as related to the operations of
3		the electric utility including, among others, generation, transmission and distribution.
4		Distribution functional costs can be divided into a number of functions, including
5		common-use costs (general and intangible-related costs). The functional assignments of
6		electric plant in service are designated by the Rural Utilities Service chart of accounts. <sup>2</sup>
7		Descriptions of these accounts can be found in the description columns of Exhibit C $-$
8		Cost of Service Study.
9	Q.	Please generally describe cost classification.
10	A.	Cost classification is the process of dividing functionalized rate base and operating
11		expense elements into customer, demand and energy-related components based upon the
12		principles of cost causation.
13	Q.	Please generally describe cost allocation.
14	A.	Cost allocation is the process of allocating costs to customer classes based upon cost
15		causation. Direct assignments are made when possible for costs that are related to
16		investments or expenses that serve only a particular customer or group of customers. The
17		remaining costs are allocated based upon a method that reflects how costs are imposed on
18		the electric utility's system. The cost of service study analysis assigns costs to each rate
19		classification in relationship to the cost-causing factors of customers, demand and energy.
20		The fundamental principle underlying the cost allocation process is that costs should be

<sup>&</sup>lt;sup>2</sup> The Rural Utilities Service (RUS) Chart of Accounts (Title 7 of the Code of Federal Regulations (CFR), part 1767. The RUS Chart of Accounts is closely aligned with the Federal Energy Regulatory Commission Chart of Accounts (18 CFR).

1		attributed to the particular customer group(s) that causes the utility to incur such costs.
2		Appropriately allocated costs then provide a basis to derive class rate of return results and
3		class revenue targets, and ultimately is an important guide in designing the rates charged
4		to each customer class.
5	Q.	What method did you employ in preparing this cost of service study?
6	А.	I used a fully distributed cost allocation methodology based on a return on rate base
7		model. Importantly, I employed methods, practices and procedures commonly accepted
8		in the electric utility industry that are outlined and prescribed in the FERC and National
9		Association of Regulatory Utility Commissioners (NARUC) manuals.
10	Q.	How have you divided the members into classifications?
11	A.	I divided the members based on JDEC's rate schedules. The customer classes included in
12		the cost of service study include: Farm & Home Service-Regular; Farm & Home Service-
13		Seasonal; Commercial & Industrial; High Load Factor Incentive Service; Bayou Bridge
14		Pumping; Large Power Service; Irrigation; Time-of-Day Irrigation Service; Farm & Rice
15		Dryers; Seasonal Time-of-Day Service Rider; Security & Flood Lighting Service; and
16		Subdivision Street Lighting Service.
17	Q.	Do these classes and rates conform to the proposed electric rate tariffs?
18	А.	Yes. The classes are unchanged in name from the current to the proposed structure.
19	Q.	What general categories of cost were examined and considered in the development
20		of the cost of service study?

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1	А.	As described above, an analysis was made of all elements of cost as defined by the FERC
2		Uniform System of Accounts [and the RUS Uniform System of Accounts], <sup>3</sup> including
3		cooperative member investment (rate base) and operating expenses (cost of service) and
4		return (margins) for the purpose of allocating these items to the customer classes. To
5		achieve this allocation we begin by functionalizing and classifying costs.
6	Q.	Please explain what you mean.
7	А.	In order to make the appropriate assignment of costs to the appropriate class of customer,
8		it is necessary to first group the costs according to their function. The functions used in
9		the cost of service study were transmission, distribution, and other costs. The next step
10		was to classify the costs. Costs are classified as customer-related, demand-related, or
11		energy-related.
12	Q.	What do you mean by customer-related, demand-related and energy-related?
13	A.	Customer-related costs are those costs necessary to provide electric service to the
14		customer independent of any usage by the customer. Some examples of these costs
15		include meter reading, customer accounting, billing and some investment in plant
16		equipment such as the meter and service line, facilities that are all necessary to make
17		service available and be connected to the overall distribution system. Portions of the
18		distribution facility are separated between the customer costs and the demand costs.
19		Demand-related costs relate to the investment and expenses associated with JDEC's
20		facilities necessary to supply the customer's full load requirements throughout the year.
21		The majority of demand-related costs consist of generation, transmission plant and the

<sup>&</sup>lt;sup>3</sup> See *supra* n.2.

1 non-customer portion of distribution plant. Energy-related costs are directly related to 2 the generation and consumption of energy and consist of such things as fuel, variable 3 O&M from generation and purchase power provider bills. The functionalized rate base 4 and operating expense items are then further separated, or classified, based upon design 5 or operating characteristics that cause the costs to be incurred. 6 Q. After the above classification of plant investment into customer, demand and 7 energy-related components, please describe the cost allocation process. 8 A. The third step in the process is cost allocation whereby the functionalized and classified 9 costs are assigned to the particular customer classes. JDEC's costs that serve only a particular customer class are directly assigned to that class e.g., lighting. The remaining 10 costs are allocated to the customer groups based on a method that is considered most 11 12 consistent with cost causation. The next step was to allocate each of the three categories 13 of cost to each customer class utilizing allocation factors appropriate for each of the 14 above categories of cost. How are the allocation factors based on a method that is considered most consistent 15 **Q**. with cost causation generally determined? 16 17 Costs are evaluated to determine the cause driving the cost to be incurred and to establish A. an allocation method that best distributes the cost based on that causation. Customer-18 related costs are generally allocated on the basis of the number of customers within each 19 class. Data for the development of the customer-related allocation factors came from 20 consultation with JDEC staff and the billing and accounting records. Some of the 21

1		customer-related accounts were allocated based on a weighted number of customers to
2		reflect the weighting associated with serving those customers.
3		Energy-related allocation factors were derived on the basis of each customer classes'
4		respective energy (kWh) requirements. Sales (kWh) to each customer class were
5		developed in consultation with WEC staff and the billing and accounting records.
6	Q.	How are demand allocation factors generally determined?
7	A.	The data necessary to develop class demand allocation factors were derived in
8		consultation with JDEC staff and from the JDEC's load research data. This load research
9		data was utilized to develop transmission and purchased power capacity-related allocators
10		based on member's coincident loads within each class. This load research data was also
11		utilized to develop distribution plant allocators based on customer's non-coincident loads
12		within each class.
13	Q.	Are any costs assigned directly to classes?
14	А.	Yes, plant associated with lighting were directly assigned. In addition, certain costs were
15		directly assignable to Bayou Bridge Pumping including, but not limited, to power supply
16		costs. Lastly, demand-related power supply costs were directly assignable to High Load
17		Factor Incentive Service. Otherwise, JDEC's accounting records do not specifically
18		identify costs directly attributable to a particular class of member(s) and require costs to
19		be allocated.
20	Q.	Please further describe how this specific cost of service model was developed for
21		JDEC.

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1	А.	The cost of service study model directly assigns or allocates each element of rate base,
2		operating expenses and return (margins) to the respective customer class. The cost of
3		service study model is a cost matrix with the Total Company component reflected in the
4		initial column and the customer classes listed horizontally in columns thereafter.
5		The cost of service study model starts with the rate base detail including each plant
6		account and continues with the remaining items of rate base, operating expenses, taxes
7		and return (margins). The cost of service study model also contains important columns
8		labeled "ALLOCATION" "IN" and "OUT". These two columns contain an acronym OR
9		code identifying the allocation factor used to allocate the particular Total Company cost
10		to the customer classes. The cost of service study model uses both internally developed
11		and external allocators. Further, the external allocators have been developed using data
12		outside the cost of service study model in consultation with JDEC staff, billing and
13		accounting records.
14	Q.	How were the Customer Allocation Factors used in JDEC's COSS?
15	А.	The Customer Allocation Factors (identified as C1A in the model) are based on the
16		number of customers in each rate classification. These allocation factors are used to
17		allocate customer specific costs, as described above.
18	Q.	How were the Weighted Customer Allocation Factors used in JDEC's COSS?
19	А.	The Weighted Customer Allocation Factor (identified as C2A in the model) are weighted
20		based upon the number of members in each rate classification, the differences in, among
21		other things, the costs for the meters among the rate classifications, and the differences in
22		the estimated costs of processing bills among the rate classifications.

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1	Q.	How were the Demand Allocation Factors used in JDEC's COSS?
2	A.	The Demand Allocation Factors (identified as D1A and D1B in the model) are based on
3		the average 12 monthly coincident peak (CP) demands for each rate classification and
4		utilized to allocate the demand components of power supply. However, these values and
5		allocations are zero for High Load Factor Incentive Service and Bayou Bridge Pumping
6		given that the power supply demand costs are directly assignable for these rate classes.
7	Q.	How were the Primary and Secondary Demand Allocation Factors developed and
8		used in JDEC's COSS?
9	А.	The Primary and Secondary Demand Allocation Factors (identified as D2A, D2B, and
10		D2C in the model) are based on the average 12 monthly non-coincident peak (NCP)
11		demands. These allocation factors are used to allocate the distribution plant related to the
12		primary and secondary lines to the individual customer classifications. Typically,
13		members taking service at higher voltage levels (primary) do not use any part of the
14		lower voltage systems (secondary), and therefore are not assigned any of the costs of the
15		lower voltage systems.
16	Q.	How were the Energy Allocation Factors developed and used in JDEC's COSS?
17	А.	The Energy Allocation Factor (identified as E1A in the model) are based on the kWh
18		purchased for each rate classification. These kWh values were based on the kWh sales
19		provided by JDEC with a proportionate share of the line losses added, based on kWh
20		purchased versus sold, to each rate classification.
21	Q.	How have you allocated Transmission Plant?

- A. The Transmission Plant was allocated using allocation factor D1B, which is the 12 CP
  average kW demand for power transmitted.
- 3 Q. How have you allocated the Distribution Plant?

4 A. The costs associated with the customer component were determined using the minimum 5 system method. The minimum system method is premised on the concept that there is a 6 minimum-size distribution system that is capable of serving all members the minimum 7 requirements. For example, certain costs exist simply to connect a customer to the 8 distribution system, e.g., poles are installed and conductor is strung to the customer, 9 along with a transformer, in order for a utility to be able to transmit electricity from the 10 point of production or purchase to the point of customer connection, or vice versa, to 11 provide a customer with service. The minimum system method is presented in the 12 NARUC cost allocation manual and asserts that the minimum-size method of 13 determining the demand and customer components as a reasonable approach for 14 allocating these costs (pgs. 87 & 90). Since the costs of this hypothetical system are 15 driven by the number of members and not by demand, these costs are considered to be 16 customer costs. The minimum system study is utilized to create demand and customer 17 classification percentages for the investment and costs in distribution poles, towers, and 18 fixtures (Account 364), overhead conductor (Account 365), underground conduit 19 (Account 366), underground conductor (Account 367), and transformers (Account 368) 20 based on the cost of the minimum unit required or most commonly utilized unit to 21 provide service and the total number of units serving the system.

1		After the costs associated with the customer component of the distribution plant are
2		calculated, the total system costs are allocated into the individual rate classifications
3		based upon the weighted average number of members in each rate classification.
4	Q.	How did you allocate the Primary Demand and Secondary Demand components of
5		the distribution plant?
6	А.	The dollars associated with the Primary Demand component and with the Secondary
7		Demand component were allocated based on the number of miles of primary distribution
8		line and the number of miles of secondary distribution line.
9	Q.	What method did you use to allocate Meters?
10	А.	Meter costs are recorded to Account 370 and are also considered customer-related costs
11		and are allocated based on the number of customers by customer class.
12	Q.	How were Depreciation and Operation and Maintenance (O&M) Expenses
13		allocated?
14	A.	Depreciation and O&M expenses for transmission and distribution plant were allocated to
15		customer classes following the same criteria as plant. Customer Accounts Expenses,
16		Customer Services and Information Expenses, and Sales Expenses are allocated based on
17		the labor allocator. Administrative & General expenses were primarily allocated on the
18		labor allocator.
19	Q.	How were the wages and salaries allocated?
20	А.	The wages and salaries were allocated between the production, transmission, distribution
21		and general functions based upon the actual amount of the wages and salaries that JDEC
22		has recorded to each function.

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1	Q.	What is the next step after the allocations are applied?
2	А.	The next step is to determine the relative return on rate base for each of the classes in the
3		cost of service study. The ratio of class revenues less expenses (net operating income)
4		divided by class rate base will indicate the proportionate contribution to the total rate of
5		return being earned by JDEC that is attributable to a particular class.
6	Q.	What else should be known about the COSS model and the results?
7	A.	The results of the cost of service study will also vary if you apply different allocation
8		factors within the cost of service study. By applying different methods to the allocation
9		process, you can change the outcome of the cost of service study. I utilized allocation
10		methods, practices and techniques consistent with the electric utility industry and as
11		outlined in the FERC and NARUC manuals.
12	Q.	What were the results of your study?
13	А.	The cost of service study indicated that the different rate classifications yielded different
14		overall rates of return. The cost of service study also indicated that differing rate
15		adjustments could be made to each rate classification. The complete cost of service study
16		is included in Exhibit C Cost of Service Study (Schedule 1). Below is a summary of
17		the results.

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	Comparison Between Adjuste	ed	COSS o	and	d Existir	١g	Revenue	e Allocatio	on
Líne		Co	st-of-Service Revenue		Existing Revenue			Percent	Return on
No.	Class		Allocation		Collection		Difference	Difference	Rate Base
1	Farm And Home Service - Regular Schedule 1	\$	15,243,150	\$	14,677,794	\$	565,356	3.85%	-5.80%
2	Farm And Home Service - Seasonal Schedule 16	\$	1,385,021	\$	948,834	\$	436, 188	45.97%	-12.39%
3	Commercial And Industrial - Schedule 2	\$	2,500,828	\$	2,820,759	\$	(319,930)	-11.34%	-0.50%
4	High Load Factor Incentive Service - Schedule 33	\$	710,881	\$	743,376	\$	(32,495)	-4.37%	-2.26%
5	Bayou Bridge Pumping - Schedule 54	\$	786,202	\$	872,980	\$	(86,778)	-9.94%	-2.02%
6	Large Power Service - Schedule 3	\$	3,508,466	\$	4,036,689	\$	(528,223)	-13.09%	3.43%
7	Irrigation - Schedule 5	\$	2,406,411	\$	2,827,156	\$	(420,745)	-14.88%	2.28%
8	Time-Of-Day Irrigation Service - Schedule 12, 312	\$	251,965	\$	254,319	\$	(2,354)	-0.93%	-4.27%
9	Farm And Rice Dryers - Schedule 6	\$	424,796	\$	410,690	\$	14,106	3.43%	-5.77%
10	Seasonal Time-Of-Day Service Rider - Schedule 15, 315	\$	77,244	\$	78,568	\$	(1,323)	-1.68%	-3.77%
11	Security And Flood Lighting Service - Schedule 9	\$	792,098	\$	437,404	\$	354,694	81.09%	-10.61%
12	Subdivision Street Lighting Service	\$	52,449	\$	30,945	\$	21,505	69.49%	-9.36%
13	Electric Revenues	\$	28,139,512	\$	28,139,512	\$	0		
14	Revenue Adjs.	\$	335,349	\$	335,349		-		
15	Misc. Revenues	\$	460,554	\$	460,554				
16	Operating Revenue & Patronage Capital	\$	28,935,416	\$	28,935,416	\$		<u>0.00%</u>	
17	System Return on Rate Base								-4.65%

<sup>1</sup> 

2 C

#### Q. What general conclusion can be made from these results?

The results of the cost of service study show that each class of customers is relatively 3 A. close to recovering the cost of service to that class, with the exception of Farm and Home 4 5 Service-Seasonal and the lighting classes. However, the returns are mostly negative due 6 to the adjusted test year negative system return on rate base, negative operating margins 7 and negative MDSC as discussed in the testimony of Witness Michael J. Heinen and 8 Witness Paul E. DeChario. The results show that (1) Schedules 2, 3, 5, 12, 15, 33, 54, 9 312, and 315 revenues are slightly above their cost of service; (2) Schedules 1 and 6 revenues are slightly below their cost of service; and (3) Schedules 1, 9, and Subdivision 10 11 Street Lighting Service revenues are below their cost of service. From my experience, it 12 is not uncommon for revenues collected through rates to be misaligned from the cost to 13 serve those customer classes.

1	Q.	Please describe the COSS cost-based rates in Exhibit C – Cost of Service Study
2		(Schedule 2).
3	A.	The cost-based rates by rate classification flow from the cost of service study model and
4		indicate by class of customer the unit cost of customer-related (per member), demand-
5		related (per kW) and energy-related (per kWh) costs. These cost-based rates are
6		particularly useful in designing rates and aligning cost attributes with recovery.
7	Q.	Please describe those results.
8	A.	A summary table is provided below. The results indicate that fixed costs, particularly
9		customer-related, could be higher than what is currently being recovered through
10		currently effective tariff rates. For instance, the cost-based rates support monthly fixed
11		cost recovery i.e., customer charge a/k/a service charge of \$35.87 for Farm and Home
12		Service-Regular. The Farm and Home Service-Regular Service Charge is currently
13		\$12.00/member/month.

	Adjusted Cost of Service	e Si	ludy C	09	st-Basec	ł R	lates		
	-		-		Demand		Demand		
Line		C	Sustomer		Related		Related		Energy
No.	Class	1	Related		(Dist. Sys.)	(Pur. Pwr.)		Related	
1	Farm And Home Service - Regular Schedule 1	\$	35,87	\$	2.05	\$	15.13	\$	0.05201
2	Farm And Home Service - Seasonal Schedule 16	\$	36,10	\$	2.10	\$	15.11	\$	0.05215
3	Commercial And Industrial - Schedule 2	\$	35.85	\$	2.00	\$	14.95	\$	0.05134
4	High Load Factor Incentive Service - Schedule 33	\$	2,300.85	\$	2.05	\$	6.02	\$	0.05042
5	Bayou Bridge Pumping - Schedule 54	\$	7,842.00	\$	0.98	\$	6.18	\$	0.02351
6	Large Power Service - Schedule 3	\$	334.78	\$	1.95	\$	14.67	\$	0.05035
7	Irrigation - Schedule 5	\$	109.33	\$	2.02	\$	15.13	\$	0.05203
8	Time-Of-Day Irrigation Service - Schedule 12, 312	\$	126.80	\$	2.04	\$	15.18	\$	0.05213
9	Farm And Rice Dryers - Schedule 6	\$	78.16	\$	2.05	\$	15.18	\$	0.05213
10	Seasonal Time-Of-Day Service Rider - Schedule 15, 315	\$	219.69	\$	2.03	\$	15.10	\$	0.05191
11	Security And Flood Lighting Service - Schedule 9	\$	8.11	\$	0.13	\$	15.10	\$	0.05223
12	Subdivision Street Lighting Service	\$	4.00	\$	0.04	\$	15.10	\$	0.05219

14

# 15 Q. Is JDEC proposing any changes to the class revenues collected based on the results

16 of the COSS?

1	А.	No, the proposed rate increase outlined in Exhibit A – Cash Requirement Study and
2		Revenue Requirement, as discussed further below, are applied in a uniform manner to all
3		rate classes with the exception of Bayou Bridge Pumping which receives a direct pass-
4		through of costs from Cleco Cajun. In other words, the proposed application of the rate
5		increase to certain rate components is not intended to modify subsidies i.e., over/under
6		collection of revenues compared to costs as identified in the cost of service study.
7		Application of the proposed rate increase to the electric rates is discussed further in the
8		rate design section of this testimony.
9		IV. RATE DESIGN AND IMPACT ON CUSTOMERS
10	Q.	Are you sponsoring the electric tariffs filed in this case?
11	А.	Yes, I am sponsoring the exhibits listed above, including the proposed rate changes
12		contained within Exhibit J – Proposed Rate Schedules.
13	Q.	Please summarize the proposed rate design for the electric tariffs.
14	А.	Exhibit E – Summary of Rate Changes (Schedule 1) outlines the proposed rate changes.
15		All proposed rate design changes are intended to result in equal application to each of the
16		rate classes as discussed above. Exhibit F – Typical Bill Calculations outlines the impact
17		on members across various usage categories. In summary, the Energy Charge for each of
18		the rate classes in increased by \$0.0129/kWh (with the exception of Bayou Bridge
19		Pumping which is billed by pass-through by Cleco Cajun). In addition, the Service
20		Charge is raised by \$3.00 in each of the applicable rate classes. JDEC is proposing to
21		close current lighting sizes and device types and replace them with LED equivalents.
22		Therefore, the monthly device charges are also increased for Security and Flood Lighting

1		Service and Subdivision Street Lighting Service. Lastly, as sponsored by Witness Paul E.
2		DeChario, the Emergency Rate Relief (EER) Rider is lowered to reflect recovery of
3		certain costs in the proposed base rate changes.
4	Q.	Please describe Exhibit D – Revenue Calculations.
5	А.	Exhibit D – Revenue Calculations outlines the determination of revenues received from
6		each JDEC rate class, by rate component i.e., service charge, energy charge, PCA, etc.
7		Proposed revenues for each rate class are then calculated by applying the proposed rate
8		changes to the billing determinants to ensure the proposed rate changes meet the overall
9		revenue requirement and proposed rate increase.
10	Q.	What are the primary purposes of Exhibit D – Revenue Calculations?
11	А.	The primary purpose of Section D is to compile JDEC's billing determinants, and to
12		utilize those determinants to calculate the amount of revenue change to be accomplished
13		by the proposed rates. In such a manner, a level of confidence is established that a
14		proposed change in rate charges will accomplish the desired level of revenue change
15		given the billing determinants utilized.
16	Q.	How did you then determine the billing determinants for the rate design?
17	А.	The billing determinants used in the rate design are provided in Exhibit $\mathrm{D}-\mathrm{Revenue}$
18		Calculations. These billing determinants were supplied by JDEC Revenue Reports from
19		its billing system for the development of this Exhibit and for purposes of rate design.
20	Q.	How did JDEC go about formulating this rate design proposal?
21	A.	In consultation with JDEC management and approved by the Board of Directors on May
22		16, 2024, the application of the proposed rate increase was determined in order to balance

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	the need for additional operating revenue while considering both the impact on the JDEC
	membership and the findings of the cost of service study. The application of the rate
	increase to each of the rate classes (1) recovers the cost of providing service; (2) moves
	the customer a/k/a service charge closer to the customer-related cost component; and (3)
	considers the impact of the rate increase on the membership.
Q.	What is the purpose of implementing the proposed interim rates?
А.	One of several rate design principles importantly seeks to reduce potential bill impacts
	i.e., rate shock by phasing in of the rate increase over a period of time. The requested
	interim rate relief raises the Energy Charge by \$0.0129 to each applicable rate schedule.
Q.	Are you proposing any changes to the existing Purchased Cost Adjustment (PCA)?
А.	No. The existing PCA as previously filed and accepted by the Commission remains
	unchanged for the recovery of power supply-related costs. No revisions or modifications
	are being proposed to the PCA tariff in the instant filing. The PCA factor is projected to
	rise from an average of \$0.04691/kWh to an average of \$0.06285/kWh. The flow-
	through of additional power supply costs under the existing PCA is a portion of the
	overall operating revenue increase outlined in Exhibit A – Cash Requirement Study and
	Revenue Requirement.
Q.	You mention above that JDEC proposes to increase the customer charge (service
	charge). Please describe why it is appropriate to align costs with the cause of cost?
А.	The current rates are configured such that a high percentage of revenue is recovered via
	the volumetric energy charge. However, JDEC has a large amount of costs that are fixed
	and do not fluctuate with energy usage. JDEC's proposal to raise the customer charge by
	Q. A. Q. A.

\$3.00 makes gradual movement toward correcting this imbalance between cost causation
 and recovery.

3 Q. Please describe why it is appropriate to align costs with the cause of the cost? 4 A. Cost recovery and cost causation alignment is used to keep rates equitable and avoid 5 distortion within the rate class. When cost elements are out of alignment, it is likely that 6 costs will not be properly recovered through the rate. Additionally, if cost recovery 7 through the energy charge is insufficient to cover fixed costs, it could render the electric 8 utility unable to pay its fixed costs, and jeopardize its ability to adequately collect 9 operating revenue to support operating expenses and the return (margins). For example, 10 if the rate collects significant proportions of revenue through the volumetric charge, 11 reductions in usage will cause an immediate under-recovery for that rate for the electric utility. Over time, within a customer class, when some customers reduce usage and 12 13 others do not, the customer with the remaining usage ends up covering the fixed costs for the customer that avoided the associated rates or charges, despite the fact that both 14 15 customers benefited from the infrastructure investment that that fixed charge is designed 16 to recover.

Price distortion is the other result of a misaligned rate. Distortion occurs when the price does not reflect the cost and results in an incorrect price signal being sent to the customer. In the example where a rate collects significant proportions of revenue through the volumetric charge, a customer might perceive that the "per kWh" value of energy is higher than it truly is. This is highlighted when you compare the energy rate paid by residential customers versus commercial & industrial customers. Comparison of the rates

1	paid generally will show that the per kWh charge paid by a residential customer is
2	significantly higher than that paid by a commercial & industrial customer. A primary
3	contributor to that differential is the fact that many fixed costs, normally recovered
4	through customer, facility, or demand charges applied to the commercial and industrial
5	customer are combined into the energy price for residential customers.

6

### Q. How do rates get out of alignment?

7 Misalignment is largely the result of pricing with limited numbers of rate components A. 8 combined with other policy considerations overriding any alignment desire. For 9 residential customers, there are only two rate components in the structure, the customer 10 charge and the energy charge. All revenue recovery is accomplished through these two 11 components. By contrast, traditional commercial and industrial rates have up to four 12 components, including the customer charge, demand charge (distribution capacity), 13 demand charge (power supply capacity) and energy charge. In this design, the customer 14 and two demand charges carry their representative portions of the fixed charge. Under 15 the limited components of the residential rate structure, the choice is between the 16 customer charge and/or the energy charge. It is in this decision where policy 17 consideration makes its impact. There has been a long tradition of maintaining relatively 18 low customer charges—as a result, nearly all of the residential fixed costs have been 19 included in the energy charge. 20 What is the risk associated with this misalignment? Q.

A. Reductions in usage, driven by reduced customer growth, energy efficiency, or even
 customer self-generation, result in under-recovery of costs. Growth would have

Jefferson Davis Electric Cooperative, Inc. Prefiled Direct Testimony of Jason A. Strong (JAS;1) LPSC Docket No. \_\_\_\_\_ May 31, 2024 Page 27 of 28

1		compensated or completely covered this shortfall in the past. With the accelerating
2		deployment of initiatives that directly impact customer growth, it is becoming
3		increasingly apparent that this risk of immediate under recovery is quite significant. On
4		the customer side, the problem with alignment can occur for multiple reasons but is most
5		clearly shown through the implementation of distributed generation. When a customer
6		deploys distributed generation at their location, they are often able to avoid most, if not
7		all, of their annual energy bill. The revenues originally received from that customer are
8		now avoided due to distributed generation. In future rate cases, those costs are spread to
9		the remaining customer usage and borne by customers without distributed generation.
10	Q.	Does JDEC's proposal totally achieve proper alignment of fixed/variable costs
11		aligned in rates?
12	А.	No, nor is that always achievable for multiple reasons. The impact of such alignment
13		could be too much to bear for customers billed under the misaligned rates for so long nor
14		is complete alignment always a practical result. The goal to achieve is to make gradual
15		progress toward a more balanced alignment of cost recovery with cost causation. JDEC's
16		proposal to increase the customer charge balances cost recovery and cost causation.
17		IV. CONCLUSIONS
18	Q.	Are the rates proposed by JDEC consistent with Commission precedent and are
19		they just and reasonable and not unduly discriminatory?
20	A.	In my opinion, yes. The results of the cost of service study provide a reasonable basis for
21		setting new redesigned rates for the application of the proposed rate increase. JDEC's
22		proposed rates collect the proposed revenue requirement by class identified in the cost of

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- 1 service study and allocated costs by function in the appropriate rates. Further, JDEC's
- 2 rate proposal to raise the customer charge are justified based on the results of the cost of
- 3 service study and supported by Commission precedent.
- 4 Q. What tariff changes does JDEC propose?
- 5 A. JDEC proposes tariff changes in Exhibit J Proposed Rate Schedules to implement the
- 6 rate changes outlined in my testimony.
- 7 Q. Does this conclude your testimony at this time?
- 8 A. Yes.

#### **BEFORE THE PUBLIC SERVICE COMMISSION**

#### OF THE STATE OF LOUISIANA

LPSC Docket No.

Application of Jefferson Davis Electric Cooperative, Inc.)(JDEC) requesting approval of Initial Revenue Adjustment,)approval of Formula Rate Plan, continuation and modification ))of Storm Rider, modification to Tariff, and request for)Interim Rate Relief pursuant to)

#### **AFFIDAVIT OF JASON A. STRONG**

State of Virginia ) Loudon County )

Jason A. Strong, being first duly sworn on his oath, states:

- My name is Jason A. Strong. I work in Dulles, Virginia, and I am employed by the National Rural Utilities Cooperative Finance Corporation as the Vice President of Utility Pricing, Policy & Analytics.
- Attached hereto and made a part hereof for all purposes in my testimony on behalf of Jefferson Davis Electric Cooperative, Inc. consisting of <u>+wεντγ ει64τ( 2%</u>) pages, having been prepared in written form for introduction into evidence in the above-captioned proceeding.
- 3. I have knowledge of the matters set forth therein. Jason A. Strong being duly sworn, deposes and says that the statements contained in the foregoing prepared testimony and the exhibits attached hereto are true and accurate to the best of his knowledge, information and belief, and that such prepared testimony constitutes his sworn testimony in this proceeding.

Jasoff A. Strong

Sworn to and ascribed before me this the 21 day of 19201111111 Notary Public SBL My Commission Expires: # 720930. COMMISSION PIRES