BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY LOUISIANA, LLC FOR APPROVAL OF GENERATION AND TRANSMISSION RESOURCES PROPOSED IN CONNECTION WITH SERVICE TO A SIGNIFICANT CUSTOMER PROJECT IN NORTH LOUISIANA, INCLUDING PROPOSED RIDER, AND REQUEST FOR TIMELY TREATMENT

DOCKET NO. U-____

DIRECT TESTIMONY

OF

SAMRAT DATTA

ON BEHALF OF

ENTERGY LOUISIANA, LLC

PUBLIC REDACTED VERSION

OCTOBER 2024

Public Redacted Version

Entergy Louisiana, LLC Direct Testimony of Samrat Datta LPSC Docket No. U-____

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EXHIBIT LIST

Exhibit SD-1

List of Prior Testimony

Exhibit SD-2

Workbook (HSPM)

Public Redacted Version

Entergy Louisiana, LLC Direct Testimony of Samrat Datta LPSC Docket No. U-____

1		I. INTRODUCTION
2	Q1.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.
3	A.	My name is Samrat Datta. My business address is 639 Loyola Avenue, New Orleans, LA
4		70130. I am the Director of Advanced Network Planning for the System Planning
5		Organization at Entergy Services, LLC ("ESL"), ¹ an organization that provides long-term
6		planning support for Entergy Louisiana, LLC ("ELL" or the "Company"), among other
7		EOCs.
8		
9	Q2.	ON WHOSE BEHALF ARE YOU SUBMITTING THIS DIRECT TESTIMONY?
10	А.	I am submitting this Direct Testimony to the Louisiana Public Service Commission
11		("LPSC" or "the Commission") on behalf of ELL in support of its Application seeking
12		various relief related to the Customer's Project, which is planned to be located in Richland
13		Parish, Louisiana, including certification of three new CCCTs and certain transmission
14		facilities.
15		
16	Q3.	PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL
17		BACKGROUND.
18	A.	I graduated from Nagpur University, India, in 2001 with a Bachelor of Science in Power
19		Electronics Engineering. I received a Master of Engineering in Electrical Engineering from
20		the University of Texas at Austin in 2002.

¹ ESL is an affiliate of the Entergy Operating Companies ("EOCs") and provides engineering, planning, accounting, technical, and regulatory-support services to each of the EOCs. The five EOCs are Entergy Arkansas, LLC, ELL, Entergy Mississippi, LLC, Entergy New Orleans, LLC, and Entergy Texas, Inc.

1	In 2003, I was hired by ESL to work in the Technical Studies Group in the
2	Transmission Planning Department. I was involved in performing voltage stability,
3	transient stability, and electromagnetic transient analyses of the Entergy Transmission
4	System. ² In 2010, I was appointed Supervisor of the Transmission Economic Studies
5	group. In that role, my responsibilities included interfacing with the Independent
6	Coordinator of Transmission, Network Service Customers, and the System Planning &
7	Operations organization in order to perform activities required by Federal Energy
8	Regulatory Commission ("FERC") Orders 717 and 890. In 2014, I became Manager,
9	Commercial and Economic Planning, where I was responsible for the economic analyses
10	and identification of economic transmission projects that benefit the EOCs' customers.
11	In 2019, I transitioned to a business role within ESL, focusing on innovation, and,
12	in 2020, into the Enterprise Planning Group, and then, into my current role as Director of
13	Advanced Network Planning for the System Planning Organization. In this role, I am
14	responsible for the development of integrated resource plans that are designed to meet the
15	company's planning objectives of sustainability, affordability, and reliability, and to
16	provide strategic direction and business support to the EOCs concerning the selection of
17	supply-side resources. I am a registered Professional Engineer in the State of Mississippi
18	and a Senior Member of the Institute of Electrical and Electronics Engineers.

The Entergy Transmission System is comprised of all transmission facilities owned by the EOCs.

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1	Q4.	HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE A REGULATORY
2		COMMISSION?
3	A.	Yes, including before this Commission. I have attached a list of prior testimony as Exhibit
4		SD-1.
5		
6	Q5.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
7	А.	The purpose of my testimony is to provide an economic analysis of the
8		(the "Project") being built by the transformed (the "Customer") as discussed more fully
9		in the Company's Application, and its costs and benefits. As I explain in more detail below,
10		the analysis addresses the costs and benefits of the generation and transmission resources
1		needed to serve the Customer's Project, net of the Customer's contributions to the costs of
12		those resources. The analysis also addresses and incorporates the benefit to all ELL
13		customers of the Customer's payment of other ELL rates such as the ELL Formula Rate
14		Plan ("FRP"), the Fuel Adjustment Clause ("FAC"), and an allocated share ³ of other
15		applicable riders including the Financed Storm Cost and Resilience Riders during the 15-
16		year original term of the Customer's electric service agreement ("ESA"). Finally, the
17		analysis addresses the economic impact and risks to ELL customers at the end of year 15
8		under a conservative assumption that the Customer chooses to terminate its electric service
9		agreement at that time.

³ The allocated share to be paid by the Customer is determined by the allocation of these rider costs to the rate schedule under which the Customer will take service, as is the case for all customers taking service under this rate schedule.

Q6. PLEASE SUMMARIZE THE KEY CONCLUSIONS TO BE DRAWN FROM THE RESULTS OF THE ECONOMIC ANALYSIS.

As I discuss in more detail below, the results of the analysis show that, after factoring in 3 A. (1) the substantial financial contributions that the Customer is making toward the cost of 4 5 the resources needed to serve the Customer Project, both through direct financial payments 6 and revenues received under the Customer's ESA; (2) the substantial payments by the 7 Customer toward other ELL rates and riders during the Original Term of the ESA (and 8 associated reduction of costs paid by other ELL customers); and (3) the avoided cost of 9 resources otherwise needed to serve the Company's other customers in the period after the 10 Original Term of the ESA expires, the addition of the Customer Project and the resources 11 needed to serve it results in no material harm to ELL's other customers. In fact, based on 12 the assumptions used in the economic assessment, it is reasonable to expect that ELL's 13 other customers will realize substantial net benefits.

- 14
- 15

II. ANALYSIS OF THE CUSTOMER PROJECT

16 Q7. PLEASE PROVIDE AN OVERVIEW OF THE ECONOMIC ASSESSMENT OF THE17 CUSTOMER PROJECT.

18 A. The economic assessment starts with a focus on the costs and benefits of the incremental 19 transmission and generation resources needed to serve the Customer Project, which are 20 presented in the Company's Application. However, because of the significant funding 21 contribution the Customer is making toward the costs of these resources, both through 22 direct financial payments and through revenues under its ESA, the analysis examines the 23 costs of these resources net of that contribution. The analysis then also addresses the

1	beneficial impacts that flow to all ELL customers from the significant new load associated
2	with the Customer Project and the associated significant contribution from the Customer
3	toward ELL's FRP, FAC, and other riders such as the Financed Storm Cost and Resilience
4	Riders during the 15-year original term of the Customer's ESA, which will have the effect
5	of greatly reducing the costs that other ELL customers pay for electricity during that period.
6	The analysis thus captures the benefit to all ELL customers associated with that savings
7	during the 15-year original term of the ESA. Finally, because there is a non-zero risk that
8	the Customer could terminate its ESA at the end of the 15-year original term, the analysis
9	addresses the risks and costs to ELL customers from the end of year 15 and going forward
10	if the Customer were to terminate its ESA at that time. The primary costs are the remaining
11	revenue requirement and other costs for the transmission and generation resources
12	proposed in this proceeding in connection with extending service to the Customer Project.
13	The analysis also captures the benefits of these resources to ELL's other customers during
14	this timeframe - primarily, the avoided cost of generation resources ELL would otherwise
15	need in this timeframe. The combined effect of these benefits and costs is compared to a
16	base case in which ELL were to avoid the costs and benefits of the generation and
17	transmission resources and forego the opportunity to serve the Customer Project. The
18	results of that analysis are presented here to inform the Commission's decision whether the
19	generation and transmission resources presented in the Company's Application, as part of

1	the broader opportunity to serve the Customer Project and secure the benefits of that Project	
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- 2 for the State of Louisiana, are in the public interest.
- 3 The major components of the economic assessment are summarized in the following table:

Table 1: Costs and Benefits Quantified in the Economic Assessment

Costs and Benefits Quantified in the Economic Assessment

Costs

Revenue requirement of the 3 CCCTs Property Tax for the 3 CCCTs

Transmission O&M Costs – Transmission Projects to Serve Customer Firm Collateral Requirement Fixed Fuel Demand for the 3 CCCTs

Revenue Requirement of Mt Olive to Sarepta Transmission Project (ELL load ratio share)

Benefits

Revenue from Customer pursuant to the ESA Resilience Rider payments from the Customer pursuant to the ESA Finance Storm costs recovered from the Customer pursuant to the ESA Avoided revenue requirement associated with avoided BP25 resources Avoided fixed fuel demand charge associated with avoided BP25 resources Seasonal Accredited Capacity Value associated with the difference between the avoided resources as they commence operation versus that of the 3 CCCTs

4

- 5 Q8. WHAT GENERATION COSTS WERE TAKEN INTO CONSIDERATION IN THE
- 6

ECONOMIC ASSESSMENT?

A. The Company's economic assessment includes the costs of the generation assets that are
required to enable the ELL electric system to maintain reliable service to its customers with
the addition of the load associated with the Customer Project, which are discussed in more

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1		detail in the Direct Testimony of Company witnesses Matthew Bulpitt and Laura
2		Beauchamp. The analysis includes the three combined cycle combustion turbine ("CCCT")
3		resources proposed in the Company's Application, of which the Company is seeking
4		Commission certification. To incorporate the cost of these CCCTs, the analysis uses the
5		revenue requirements associated with each resource, including reasonable estimates of
6		items such as firm fuel demand charges, property taxes, firm collateral requirements, and
7		accumulated deferred income taxes.
8		
9		
10		Moreover, ELL's assumed operations and maintenance ("O&M") costs over the life of
11		these three CCCT resources were also included in this analysis.
12		
12		
13		
14		
15		
16	Q9.	WHAT TRANSMISSION COSTS WERE TAKEN INTO CONSIDERATION IN THE
17		ECONOMIC ASSESSMENT?
18	А.	The addition of the Customer's load necessitates transmission upgrades on the Company's
19		transmission system, as detailed in the Direct Testimony of Company witness Daniel Kline.
20		As Mr. Kline and Company witness Ryan Jones discuss in more detail in their respective
21		Direct Testimonies, the Customer is directly funding the capital cost of many of these
22		transmission upgrades. The capital cost of one of these upgrades, however, will be
23		included in ELL customer rates the Mt. Olive to Sarepta 500 kV line. Accordingly, the

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1		45-year revenue requirement associated with this transmission project, which includes
2		substation upgrades at the Sarepta and Mt. Olive 500 kV switch yards, as well as the 500
3		kilovolt ("kV") line between the two substations, was included in the economic analysis. ⁴
4		Because the cost of this project is expected to be included in ELL's FERC-jurisdictional
5		transmission rates and allocated to ELL transmission customers who take service in the
6		ELL Transmission Pricing Zone ("TPZ"), the transmission revenue requirement associated
7		with the project was adjusted down to reflect only the approximately 20% portion of the
8		cost of the project that will be borne by the Company's retail customers. Additionally, the
9		O&M costs associated with the new transmission projects presented in the Company's
10		Application, including the Mt. Olive to Sarepta 500 kV line, were also included as cost
11		items in the economic analysis.
12		
13	Q10.	WHAT CUSTOMER REVENUES WERE CONSIDERED IN THE ECONOMIC
14		ASSESSMENT, AND WOULD YOU EXPLAIN WHY THOSE WERE CONSIDERED?
15	А.	The electric service revenues that will be received from the Customer during the Original
16		Term of the Customer's ESA (2026 through 2041) were considered in the economic
17		analysis. ⁵ The revenues assume a load factor consistent with expectations for service
18		to the Customer Project. These revenues reflect the Customer's payment of the Company's

⁴ The cost of another transmission project needed to serve the Customer Project – substation equipment upgrades at the Sterlington 500 kV substation – will also be included in ELL customer rates. The estimated cost of this project is immaterial (under \$1M). For simplicity's sake, references to the Mt. Olive to Sarepta 500 kV line and associated costs in my direct testimony (including in the charts and tables) are inclusive of the Sterlington 500 kV substation costs.

⁵ Revenues that will be collected from the Customer pursuant to the Agreement for Contribution in Aid of Construction and Capital Costs ("CIAC Agreement") will be used to offset fully the costs of certain transmission projects because these revenues and costs offset, both were disregarded for purposes of the economic analysis.

1		FRP Rate Adjustment, FAC, and an allocated share of other applicable riders including the
2		Financed Storm Cost and Resilience Riders, during the 15-year original term of the ESA.
3		These revenues collected from the Customer during the 15-year Original Term of the ESA
4		serve to reduce the rates paid by other ELL customers during that period, and this benefit
5		to other ELL customers is captured in the economic analysis and assumed to offset the
6		costs of the generation and transmission resources I discussed above.
7		
8	Q11.	WHAT GENERATION-RELATED BENEFITS WERE TAKEN INTO
9		CONSIDERATION IN YOUR ANALYSIS?
10	А.	No generation benefits during the original term of the ESA were included in this economic
11		analysis. Below, I discuss certain generation benefits after the assumed termination of the
12		ESA in 2041 that are included in the economic analysis.
13		
14	Q12.	WHAT TRANSMISSION BENEFITS WERE TAKEN INTO CONSIDERATION IN
15		YOUR ANALYSIS?
16	А.	No transmission benefits were included in this economic analysis. While the transmission
17		projects presented in the Company's application, particularly the Mt. Olive to Sarepta 500
18		kV project, are reasonably expected to provide benefits to ELL customers as discussed in
19		the Direct Testimony of Mr. Kline, these benefits were not captured in the economic
20		analysis.

1	Q13.	HOW DID YOUR ECONOMIC ANALYSIS COMPARE THE COSTS AND BENEFITS
2		OF THE GENERATION AND TRANSMISSION RESOURCES AND THE REVENUES
3		RECEIVED FROM THE CUSTOMER?
4	А.	My analysis tallied the Customer's revenue contributions during the 15-year original term
5		of the ESA and compared that to the various generation and transmission costs summarized
6		above to determine the net impact of the costs of the resources needed to serve the
7		Customer Project on the rest of ELL's customers.
8		
9	Q14.	DID YOUR ANALYSIS ADDRESS THE EFFECT ON OTHER ELL CUSTOMERS, AS
10		IT RELATES TO THE COSTS OF GENERATION AND TRANSMISSION
11		RESOURCES, IF THE CUSTOMER WERE TO TERMINATE ITS PROJECT AT THE
12		END OF THE INITIAL 15-YEAR TERM OF THE ESA?
13	A.	Yes, to aid in evaluating the costs and benefits to ELL's other customers that result from
14		the resources needed to serve the Customer Project, my analysis conservatively assumed
15		that the Customer elects not to continue receiving electric service from the Company after
16		the expiration of the 15-year Original Term of the ESA in 2041. In that scenario, the load
17		associated with the Customer Project would no longer be served by the Company.
18		However, the infrastructure improvements, including the three CCCTs presented in the
19		Company's Application would still be functional for the benefit of ELL's remaining
20		customers for the remainder of these resources' commercial life. Assuming the Customer
21		were to terminate its ESA in 2041, the then-remaining net book value on these three CCCTs
22		would be approximately 59% of the original investment in these units; at that point in time,
23		approximately 48% of the total 30-year revenue requirement for these CCCTs will remain

to be paid by ELL's other customers. My analysis therefore explored the impact that these 1 generation projects would have on the Company's long term resource plan, the resources 2 therein, and the resulting costs to ELL customers. 3 While I am aware of no basis to believe the Customer would actually be likely to 4 5 terminate its ESA in 2041, the analysis makes that assumption to assess the most costly scenario for ELL's other customers and establish a "bookend"; in other words, if the 6 Customer elects to continue taking service for its Project from ELL beyond 2041, that 7 generally would be expected to reduce the costs and increase the benefits to ELL's other 8 customers, and in that respect, the results of my economic analysis may reasonably be 9 viewed as conservative. 10 11 WHAT EFFECT DID THE GENERATION RESOURCES NEEDED TO SERVE THE 12 Q15. CUSTOMER PROJECT HAVE ON ELL'S LONG-TERM RESOURCE PLAN AND 13 THE ASSOCIATED COSTS TO OTHER ELL CUSTOMERS AFTER THE ASSUMED 14 15 **TERMINATION OF THE ESA IN YEAR 15?** The Company's long-term resource plan contemplates the continuation of the electric 16 A. service to the Customer Project and the need for additional resources in the future (and 17 beyond the term of the Customer's 15-year original term of the ESA) to serve future load 18 19 growth and to maintain resource adequacy. However, should the Customer terminate its ESA after Year 15 and the Customer's load no longer need to be served beyond that date 20

(2041), some of these future resources would no longer be required to maintain resource
adequacy.

1	My analysis found that the termination of the Customer's ESA obviates the need
2	for two assumed combined cycle resources with commercial operation dates ("CODs") in
3	2041 and 2044, respectively, and two combustion turbine-generators with CODs in 2042
4	and 2043, respectively. I refer to these four resources as the "Otherwise Needed
5	Generators." My analysis of the costs and benefits to ELL's other customers after assumed
6	termination of the Customer ESA, therefore, assumed that the revenue requirement
7	associated with the four Otherwise Needed Generators can be avoided during the remainder
8	of the commercial life of the three CCCT resources for which the Company seeks approval
9	in this proceeding. My analysis likewise assumes that the fuel demand charge associated
10	with the four Otherwise Needed Generators can be avoided for the duration of the
11	commercial life of the three CCCT resources for which the Company seeks approval in
12	this proceeding (and, consistent with this assumption, the analysis captures the continuing
13	cost of the fixed fuel demand charge associated with these three CCCTs). In addition,
14	because the assumed quantity of installed capacity of the four Otherwise Needed
15	Generators is different from that of the three CCCT resources for which the Company seeks
16	approval in this proceeding, the capacity value associated with that difference in those
17	capacity quantities (i.e., the difference between the Seasonal Accredited Capacity ("SAC")
18	values of the Otherwise Needed Generators in the future as they commence commercial
19	operation in the years following 2041 as compared to the SAC value of resources
20	associated with the three CCCTs proposed in the Company's Application) is quantified at
21	the levelized cost of a new-build combustion turbine generator in my analysis.

1 Q16. WHAT KEY ASSUMPTIONS DID YOU MAKE FOR THIS PART OF YOUR 2 ANALYSIS?

My analysis assumed that should the Customer choose not to renew the current ESA 3 A. beyond its 15-year Original Term, the resulting reduction in the Company's planning 4 reserve margin requirement would enable the Company, at that point in time, to be able to 5 utilize the three CCCT resources for which the Company is seeking approval in this 6 proceeding to displace generation resources that would otherwise be needed during that 7 8 timeframe. This opportunity arises from the ability to offset the need to construct the four Otherwise Needed Generators. The lead-times associated with the scoping, design, 9 procurement, construction, and execution of projects for large generators such as the 10 Otherwise Needed Generators typically span several years. Nonetheless, my analysis 11 assumes that the Company would be able to discern the Customer's choice not to continue 12 13 with electric service beyond the 15-year original term, or otherwise plan for the four Otherwise Needed Generators in a manner that would allow the Company to manage these 14 15 lead times and fully secure for the Company's other customers the benefit of offsetting the Otherwise Needed Generators in the future. My analysis contemplates that the Company 16 would engage with the Customer on a periodic basis, especially at the start of the lead-17 times associated with the construction of the avoided combined cycle resources – which 18 19 have the longer lead-times - to ascertain the Customer's intent with respect to renewing or terminating its ESA with the Company and to communicate the Company's perspective on 20 21 planning the resources needed to continue serving the Customer Project beyond 2041. 22 While the Original Term of the ESA runs through November 30, 2041, it provides for 23 automatic five-year renewal terms, unless either party to the ESA provides notice at least

twelve months in advance that it does not intend to renew, with both parties agreeing to 1 use best efforts to provide such notice twenty-four months in advance of termination. 2 Should the Company not be able to ascertain the Customer's intent with respect to 3 continuing electric service at the conclusion of the ESA's original term, the Company may 4 reasonably choose not to begin construction of the Otherwise Needed Generators. In that 5 scenario, the Company may have other means of ensuring resource adequacy in the years 6 7 immediately after the conclusion of the current 15-year original term of the ESA, allowing for the risk that the Customer will in fact continue to take service beyond the original term 8 of the ESA, such as short-term Power Purchase Agreements or extensions of existing 9 generators' commercial lives. While it is not reasonable to rely on such short-term 10 resources to meet significant long-term needs, they can be effective in serving as a bridge 11 during times of uncertainty concerning future loads or capacity needs. It is therefore 12 reasonable to assume that the benefit associated with avoiding the capital outlay for these 13 14 four Otherwise Needed Generators would accrue to ELL's other customers. As mentioned 15 before, my analysis assumes that the costs associated with the fixed fuel demand charge 16 for the four Otherwise Needed Generators can also be fully avoided.

Q17. PLEASE PROVIDE A SUMMARY OF THE MAJOR COMPONENTS OF THE ECONOMIC ANALYSIS.

- 3 A. The following table/graphic summarizes the major components of my economic analysis:
- 4
- 5

Figure 1: Summary of Economic Assessment (HSPM)



8 Q18. DID YOUR ANALYSIS CAPTURE THE EFFECT ON ELL'S VARIABLE
9 PRODUCTION COSTS OF SERVING THE CUSTOMER PROJECT AND ADDING
10 THE GENERATION AND TRANSMISSION RESOURCES NEEDED TO SERVE THE
11 CUSTOMER PROJECT?

A. No. It is my understanding that ELL generally has a legal and regulatory obligation to
serve the Customer Project if the Customer desires to take the service and is willing to pay

the cost of that service. And here, it is my understanding based on the data I have reviewed 1 that the direct financial contributions from the Customer and the revenues received from 2 the Customer will offset the cost of the incremental resources necessary to serve the 3 Customer Project during the Original Term of the Customer's ESA. For these reasons, my 4 analysis did not delve into the effect on ELL's variable production costs of serving the load 5 from the Customer Project, nor did my analysis consider the variable production cost 6 effects of adding the three CCCTs and the transmission facilities needed to serve the 7 Customer Project. However, if it is assumed that ELL has an obligation to serve the 8 9 Customer Project load and the load's effects on ELL's variable production costs are therefore disregarded, then omitting the variable production cost impacts of the three 10 CCCT resources needed to serve the Customer Project is a conservative assumption. In 11 other words, capturing those effects would likely increase the benefits to ELL's other 12 13 customers.

14

15 Q19. WHAT WERE THE RESULTS OF YOUR ANALYSIS?

16 A. The results of my economic analysis are detailed in a workbook attached as HSPM Exhibit 17 SD-2. Those results (summarized in Table 2 below) show that: (1) the savings to ELL's other customers from the Customer's contributions through electric service revenues (in 18 2024 Dollars) and (2) the post-2041 benefits to ELL's other customers of the three CCCTs 19 proposed in the Company's Application collectively exceed the revenue requirement and 20 21 other costs associated with those three CCCTs and the transmission resources proposed in connection with service to the Customer Project by \$. This amount represents 22 sayings or benefits to ELL's other customers resulting directly from the addition of service 23

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1	to the Customer Project and the resources proposed in the Company's Application. The
2	following table summarizes the key costs and benefits that, when combined, lead to this
3	net benefit result:

4

Table 2: Net Benefit to Other ELL Customers (HSPM)

Costs	NDV (2024¢
Drangered 2 1:1 CCCTa Devenue Desuirement (through Nevember 2011)	NPV (2024\$
Proposed 3 1x1 CCC1s - Revenue Requirement (through November 2041)	
Property Tax	
O&M on Transmission Projects in Company Application (through November 2041)	
Firm Collateral Requirement	
Fixed Fuel Demand - 2029 CCCT @ Franklin Farms 1 (2041 - 2059)	
Fixed Fuel Demand - 2029 CCCT @ Franklin Farms 2 (2041 - 2059)	
Fixed Fuel Demand - 2030 CCCT @ Generator 3 (2041 - 2059)	
Total Costs During ESA	
5	
Benefits	
ESA Revenue (through November 2041)	
Resilience Plan Recovery Charge (through November 2041)	
Storm Charges (through November 2041)	
Total Benefits During ESA	
ESA Net Benefits (through November 2041)	
Costs and Benefits at the Conclusion of the Current ESA	
costs and benefits at the conclusion of the current LSA	
Costo	
LUSIS	

Post ESA 3 1x1 CCCTs - Revenue Requirement (2041 - 2059)

Property Tax	
Post ESA Transmission O&M (2041 - 2059)	
Fixed Fuel Demand - 2029 CCCT @ Franklin Farms 1 (2041 - 2059)	
Fixed Fuel Demand - 2029 CCCT @ Franklin Farms 2 (2041 - 2059)	
Fixed Fuel Demand - 2030 CCCT @ Generator 3 (2041 - 2059)	
Total Costs – Post-Customer ESA	
Benefits	
Avoided BP25 Resources:	
LR Revenue Requirement - 2 CCCTs & 2 CTs	
Fixed Fuel Demand - 2 CCCTs & 2 CTs	
Total costs avoided	the stand and a standard
	and the second
Capacity Benefit (2041 - 2059)	
Total Project Benefits	
Project Net Benefits (November 2041 through 2059)	
Sarepta to Mt Olive Transmission Revenue Requirement (Load Share post ESA)	
Net Benefits for Other ELL Customers 2024 - 2059	

Q20. WHAT KEY CONCLUSIONS CAN REASONABLY BE DRAWN FROM YOUR RESULTS?

The results of the analysis show that, after factoring in the substantial financial 3 A. contributions that the Customer is making toward the cost of the generation and 4 transmission resources proposed in the Company's Application through the revenues the 5 Company will receive under the Customer's ESA,⁶ the addition of the Customer Project's 6 load and the generation and transmission resources proposed in the Company's Application 7 8 will result in no material harm to ELL's other customers. In fact, the results show that, 9 based on the assumptions used in the economic assessment, it is reasonable to expect that 10 ELL's other customers will realize substantial net benefits. And this is true even under the conservative assumption that the Customer terminates service in 2041, after the end of the 11 12 original term of its ESA.

13 The results of the analysis generally show that the savings that ELL's other 14 customers experience from (1) the Customer's financial contributions toward the 15 generation and transmission resources proposed in the Company's Application; (2) the 16 Customer's payment for electric service under the ESA including payment of ELL's other 17 rates during the 15-year original term of its ESA; and (3) the avoided cost of generation resources otherwise needed by ELL's customers in the period after the end of the original 18 19 term of the ESA, collectively, substantially exceed and offset the costs of the generation 20 and transmission resources proposed in the Company's Application to ELL's other 21 customers after 2041, assuming the Customer terminates its ESA at that time.

⁶ As noted above, the economic analysis omits the transmission costs and generation financing costs that the Customer is funding directly through its CIAC Agreement, as these costs and revenues offset each other.

1 Q21. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A. Yes, at this time.

AFFIDAVIT

STATE OF LOUISIANA

PARISH OF ORLEANS

NOW BEFORE ME, the undersigned authority, personally came and appeared, **Samrat Datta**, 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.

Samrat Datta

SWORN TO AND SUBSCRIBED BEFORE ME THIS 18+4 DAY OF Q tober 2024

NOTARY PUBLIC

My commission expires: A + Death



Exhibit SD-1 LPSC Docket No. U-Page 1 of 1

DATE	<u>TYPE</u>	JURISDICTION	DOCKET NO.
04/21/2015	Direct	LPSC	U-33605
08/11/2017	Direct	PUCT	47462
12/11/2017	Rebuttal	LPSC	U-34447
09/08/2021	Direct	LPSC	U-35927
01/31/2022	Direct	LPSC	U-36135
02/14/2022	Direct	LPSC	U-36133
03/04/2022	Cross-Answering	LPSC	U-36135
3/18/2022	Cross-Answering	LPSC	U-36133
1/20/2023	Direct	LPSC	U-36514
01/26/2023	Direct	LPSC	U-36515
03/05/2024	Direct	LPSC	U-37131

Listing of Previous Testimony Filed by Samrat Datta

BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY LOUISIANA, LLC FOR APPROVAL OF GENERATION AND TRANSMISSION RESOURCES PROPOSED IN CONNECTION WITH SERVICE TO A SIGNIFICANT CUSTOMER PROJECT IN NORTH LOUISIANA, INCLUDING PROPOSED RIDER, AND REQUEST FOR TIMELY TREATMENT

DOCKET NO. U-____

EXHIBIT SD-2

HIGHLY SENSITIVE PROTECTED MATERIAL

INTENTIONALLY OMITTED

OCTOBER 2024