BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

EX PARTE: APPLICATION OF)
ENTERGY LOUISIANA, LLC)
FOR APPROVAL OF ALTERNATIVE)
PROCESS TO SECURE UP TO 3,000 MW)
OF SOLAR RESOURCES,)
CERTIFICATION OF THOSE)
RESOURCES, EXPANSION OF THE)
GEAUX GREEN OPTION, APPROVAL)
OF A NEW RENEWABLE TARIFF, AND)
RELATED RELIEF)

DOCKET NO. U-____

DIRECT TESTIMONY

OF

LAURA K. BEAUCHAMP

ON BEHALF OF

ENTERGY LOUISIANA, LLC

MARCH 2023

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EXHIBIT LIST

Exhibit LKB-1 Listing of Previous Testimony

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1		I. <u>INTRODUCTION</u>				
2	Q1.	PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.				
3	A.	My name is Laura Beauchamp. I am employed by Entergy Louisiana, LLC ("ELL" or				
4		the "Company") as the Director, Resource Planning and Market Operations. My business				
5		address is 4809 Jefferson Highway, Jefferson, Louisiana 70121.				
6						
7	Q2.	ON WHOSE BEHALF ARE YOU FILING THIS DIRECT TESTIMONY?				
8	A.	I am filing this Direct Testimony on behalf of ELL.				
9						
10	Q3.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND				
11		PROFESSIONAL EXPERIENCE.				
12	A.	In 2000, I earned a Bachelor of Science in Management degree with a concentration in				
13		Finance and in 2004 I was awarded a Master of Business Administration degree with a				
14		concentration in Energy Finance. Both of these were granted by Tulane University's A.				
15		B. Freemen School of Business.				
16	16 I have been employed by affiliates of Entergy Corporation since 2000 and have					
17		held various roles of increasing responsibility in Accounting, Finance, Regulatory, and				
18		Innovation. From 2009 through 2014, I served as the Manager of Regulatory Affairs for				
19		Entergy Louisiana, LLC and Entergy Gulf States Louisiana, L.L.C. ("EGSL"), a role in				
20		which I was responsible for providing regulatory support services to those utilities,				
21		including in rate proceedings and associated regulatory filings with the Louisiana Public				
22		Service Commission ("LPSC"). Later, from 2016 through 2018, I served as the Finance				
23		Director for ELL. From 2018 through 2022 I held roles as the Director of Utility Finance				

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1		and Strategy for Entergy Services, LLC and as Director of Innovation Strategy and
2		Consulting at KeyString Labs, Entergy's innovation center.
3		,
4	Q4.	PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES.
5	A.	As the Director of Resource Planning and Market Operations for ELL, I am responsible
6		for managing the planning of generation, transmission, and wholesale power activities for
7		ELL. This involves working closely with Entergy Services, LLC's ("ESL") generation
8		and transmission planning organizations on these activities.
9		
10	Q5.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?
11	A.	Yes. A list of my prior testimonies is attached as Exhibit LKB-1.
12		
13	Q6.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
14	A.	Through this first portion of my Direct Testimony, I describe ELL's current generating
15		portfolio, our recent path to acquire access to renewable resources, and an outline of a
16		proposal to expedite the addition of renewable resources to ELL's portfolio. The request
17		being made in this docket supports a need for up to 3,000 megawatts ("MW") of
18		incremental solar photovoltaic ("PV") generating resources to meet customer demand and
19		resource planning needs, and I explain the growing demand for solar resources from
20		ELL's existing customers as well as from new customers looking to invest in the State of
21		Louisiana, a determining factor of which is the utility's ability to serve the customer with
22	-	renewable generation. The next portion of my Direct Testimony in support of phase two

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- of the Application in this docket will address more specifically the various aspects of the
 proposal to expedite evaluation and procurement of the needed solar resources.
- 3

4 II. <u>RESOURCE PLANNING NEEDS MET BY THE PROPOSAL IN THIS DOCKET</u>

5 Q7. WHAT IS THE GOAL OF ELL'S RESOURCE PLANNING?

A. ELL's resource planning efforts are driven by the fundamental goal to deliver a
sustainable resource portfolio that is centered on customer outcomes. Building a
sustainable portfolio requires that ELL carefully balance three key objectives: reliability,
affordability, and environmental stewardship. This balance looks at both the near-term
and long-term benefits and risks associated with each key objective.

ELL's development of a sustainable portfolio places an emphasis on customer preferences. ELL recognizes that customer expectations for electric service will continue to change alongside advancements in technology and evolving market and policy considerations both in and out of the traditional utility framework. Accordingly, ELL aims to meet customers' needs for reliable, reasonably priced electric services and energy solutions both for those expected today and in the future.

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18 Q8. PLEASE ELABORATE ON THE THREE KEY OBJECTIVES YOU MENTIONED 19 FOR BUILDING A SUSTAINABLE PORTFOLIO.

A. Reliability as a planning objective means ensuring that the stability of the grid is maintained through adequate resources to meet capacity and energy needs along with adequate transmission and distribution systems to ensure that power is reliably delivered to customers. Ensuring that there are adequate resources to meet customer demand is

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1 more than just supplying a certain number of megawatts or zonal resource credits. 2 Resource adequacy must consider the diversity of the supply portfolio – both in 3 technology type and operational characteristics - combined with customer-targeted 4 energy efficiency and demand-side resources. It also must consider the location of 5 resources, proximity of those resources to customer load, and the availability of those 6 resources under various conditions. The ability of the transmission and distribution 7 system to deliver those resources to customers is also a key aspect of maintaining 8 reliability, and the careful integration of generation, transmission, and distribution 9 ensures that this reliability can be delivered at the lowest reasonable cost.

10 Affordability as a planning objective means keeping customer costs reasonable, 11 considering current and future cost impacts of infrastructure improvements made on 12 behalf of our customers and taking advantage of scale to provide cost synergies. ELL 13 recognizes the importance of maintaining affordable rates for customers and prides itself 14 on the ability to maintain some of the lowest rates in the country. This requires balancing 15 of various cost components such as capital investment, operations and maintenance 16 expense, and fuel costs. Cost stability requires that ELL examine its portfolio over a 17 variety of futures to ensure the long-term supply productivity of the resource.

Environmental stewardship as a planning objective refers to the use and protection of the natural environment, ensuring compliance with existing and likely regulations, adaptability of resources, and paths towards a lower-carbon economy. Portfolios that are capable of adapting and remaining sustainable over the long-term horizon bring customers increased benefits and help to manage long-term cost-stability. When considering our environmental stewardship objective, we also monitor customers'

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1	•	desire for decarbonization through lower emission generation, local renewables, and
2		offerings that allow customers to meet their own sustainability goals in partnership with
3		their utility. With our ability to provide broad access to customers, ELL stands in a
4		unique position to enable and extend a lower carbon economy to all customers and the
5		communities that ELL serves.
6		Appropriately balancing these three objectives with consideration of the near-term
7		and long-term risks associated with each result in lowest reasonable cost portfolios for
8		customers.
9		
10	Q9.	PLEASE DESCRIBE ELL'S LONG-TERM RESOURCE PLANNING PROCESS.
11	A.	The core elements of ELL's resource planning process are: (1) a determination of the
12		capability of the Company's current resources; (2) a forecast of the peak load plus reserve
13		margin and energy that the Company expects to serve over the planning horizon; and (3)
14		a determination of the amount and types of additional supply-side and demand-side
15		resources that will be needed to meet the Company's load and energy requirements.
16		As part of its resource planning efforts, ELL has developed and continues to
17		refine an Integrated Resource Plan ("IRP"), which is filed at the LPSC pursuant to the
18		Commission's IRP rules. ¹ ELL's most recent submission of an IRP to the Commission
19		was on October 21, 2022 (ELL's "Draft 2023 IRP"). ² Given the uncertainty and fluidity
20		inherent in long-term resource planning, ELL's IRP provides a framework for the

¹ See, LPSC Corrected General Order dated April 20, 2012, In re: Development and Implementation of Rule for Integrated Resource Planning for Electric Utilities, Docket No. R-30021.

² See, Integrated Resource Plan Draft Report (October 21, 2022), In re: 2021 Integrated Resource Planning ("IRP") Process for Entergy Louisiana, LLC Pursuant to the General Order No. R-30021, Docket No. I-36181.

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1 Company to plan for resources over the next several years but does not serve as a 2 prescriptive plan to address ELL's long-term generation needs and options for meeting those needs. Circumstances will necessarily change, and resource procurement decisions 3 4 will be made based on the best information available at the time. ELL presents those 5 decisions and the support for them to the Commission when seeking resource 6 certifications required under applicable General Orders. ELL also has presented to the 7 Commission results of certain aspects of its continuous resource planning efforts outside 8 the formal IRP process. For example, ELL recently received LPSC approval for its 2021 9 Solar Portfolio, which consists of four solar PV resources with a total nameplate capacity 10 of 475 MW, as well as ELL's Geaux Green Option ("Rider GGO") green tariff.³ ELL 11 also has a current request before the Commission for the certification of two additional 12 solar PV resources which will also further expand the GGO portfolio.⁴

As described in detail in ELL's 2019 IRP and Draft 2023 IRP, and demonstrated in Commission Docket U-36190 (in which the Commission approved ELL's 2021 Solar Portfolio)⁵ and Docket U-36685 (ELL's 2022 Solar Portfolio filed on February 28, 2023), ELL is projected to need additional long-term generating capacity over the course of the long-term planning horizon to replace deactivated capacity and address load growth, in order to reliably serve customers. In each of those dockets, solar resources were

³ See, LPSC Order No. U-36190 (October 14, 2022), In re: Application for Certification and Approval of the 2021 Solar Portfolio, Rider Geaux Green Option, Cost Recovery and Related Relief, Docket No. U-36190.

⁴ See, LPSC Docket No. U-36685, In re: Application of Entergy Louisiana, LLC for Approval of the 2022 Solar Portfolio, Expansion of the Geaux Green Option, Cost Recovery and Related Relief (seeking approval of Iberville, a 175 MW PPA, and Sterlington, a 49 MW self-build facility).

⁵ See, LPSC Order No. U-36190, supra, note 3, approving a portfolio of 4 resources totaling 475 MW: (1) Sunlight Road, a 50MW PPA, (2) Vacherie, a 150 MW PPA, (3) Elizabeth Solar, a 125 MW PPA, and (4) Vacherie, a 150 MW Build-Own-Transfer facility.

identified as an economic option to address ELL's long-term capacity and energy needs,
owing in part to the lower cost of solar resources; ELL's recent investments in
dispatchable, gas-fired generation also play a key role in renewable deployment by
enhancing ELL's ability to integrate intermittent resources like solar into its resource
portfolio without jeopardizing reliability or shifting cost responsibility for reliability to
customers of other utilities.

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8 Q10. PLEASE DESCRIBE THE COMPANY'S CURRENT RESOURCE PORTFOLIO.

9 A. ELL controls 11.8 gigawatts ("GW")⁶ of in-service capacity through direct ownership, 10 capacity contracts with third parties, life-of-unit contracts with other Entergy Operating Companies,⁷ or Demand Response resources. Over the last fifteen years, ELL has 11 12 transformed and modernized its generation portfolio to support existing customers' needs 13 and address significant current and expected industrial load growth in Louisiana by adding reliable and more efficient combustion turbine ("CT") and combined cycle gas 14 15 turbine ("CCGT") generating units to meet its supply needs. More recently, as 16 technological advancements made utility-scale solar economic, ELL began its transition 17 to more renewable resources with the addition of the 50 MW Capital Region Solar 18 facility in Port Allen, Louisiana. Further, in 2022, the LPSC approved a 475 MW solar 19 portfolio that consists of 4 solar resources to be developed in the State of Louisiana, and, 20 in 2023, ELL has already requested approval of an additional 224 MW solar portfolio 21 consisting of 2 solar resources to be developed in the State of Louisiana.

⁶ By way of comparison, 1 GW is the equivalent of 1,000 MW.

⁷ The five Entergy Operating Companies are ELL; Entergy Arkansas, LLC; Entergy Mississippi, LLC; Entergy Texas, Inc.; and Entergy New Orleans, LLC.

1 Table 1 below shows ELL's current (2022) resources by fuel type, including 2 demand-side resources and supply-side resources owned by ELL and under contract 3 through power purchase agreements ("PPAs").

4 5

Table 1

202	2 ELL Resource Pa	ortfolio
	Unforced Capacity ("UCAP")	UCAP %
Coal	MW⁸ 378	3.2%
Nuclear	1,986	16.7%
CCGT	4,880	41.1%
СТ	1,275	10.7%
Legacy Gas-Steam	2,776	23.4%
Renewable	268	2.3%
Load Modifying Resources ("LMRs")	301	2.5%
Total	11,864	100.0%

⁸ MISO, Business Practices Manual Resource Adequacy, MISO Energy (October 31, 2022), available at https://www.misoenergy.org/legal/business-practice-manuals; *Id. at.* Section 4.2.1.5.2. Solar generation in the renewable category is reflected at an effective capacity of 50% based on credit received from the Midcontinent Independent System Operator, Inc. ("MISO").

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Figure 1 below shows ELL's energy mix in 2022 by generation type.



Figure 1

Approximately 23% of the capacity in the Company's current resource portfolio is comprised of legacy generation units that have been in-service for over 45 years, with the oldest being in operation for 57 years. While the Company has made and will continue to make investments to maintain these generators when economic to do so, many of these generators are expected to reach the end of their useful lives and become deactivated during the next eight years.⁹

⁹ For example, ELL deactivated Waterford 1 during the first quarter of 2021. See LPSC Docket No. X-35751 (October 19, 2018), Entergy Louisiana, LLC, ex parte, In re: Notice of Informational Filing Pursuant to Commission General Order (Docket No. R-34407) Regarding Retirement of the Waterford Plant 1 Generating Unit; see also, Entergy Louisiana 2023 Integrated Resource Plan (Draft Report), Entergy Louisiana, LLC, ex parte, 2021 Request to Initiate Integrated Resource Planning Process Pursuant to the General Order (Corrected) in Docket No. R-30021, Docket No. I-36181, p. 26.

Q11. HOW DO MISO RESOURCE ADEQUACY REQUIREMENTS INFLUENCE THE COMPANY'S RESOURCE NEEDS?

A. ELL's resource planning efforts are primarily focused on the planning objectives I noted
 above to deliver the right type and amount of generating capacity to reliably serve
 customers. In doing so, ELL must also account for the resource adequacy requirements
 set out by MISO for the prompt Planning Year to ensure that the results of our planning
 efforts meet those requirements.

8 While MISO has no responsibility to build or provide capacity, it nevertheless 9 assigns resource adequacy requirements to load-serving entities in its footprint, including 10 ELL. Historically, MISO provided annual resource adequacy requirements; however, 11 MISO will be implementing its new Seasonal Resource Adequacy Construct for the 12 2023-2024 planning year. For this new resource adequacy construct, MISO has 13 conducted seasonal assessments to evaluate potential resource adequacy risks for the 14 upcoming season. These assessments evaluate projected near-term available capacity 15 under probable and extreme peak load forecasts, as well as historical generator outage 16 conditions for each season. The assessments highlight potential issues in the upcoming 17 seasons to help system operators and stakeholders prepare for potentially strained system 18 conditions and develop preventative actions.¹⁰ ELL has received results of the seasonal 19 ratings for generators from MISO, and, in light of these, ELL believes that it has 20 sufficiently followed the long-term planning principles I have described to ensure a 21 reliable portfolio that serves the best interest of ELL's customers and also satisfies 22 MISO's resource adequacy construct.

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See, Resource Adequacy, MISO, https://www.misoenergy.org/planning/resource-adequacy.

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1 As part of its resource adequacy requirements, MISO determines how much 2 capacity must be located within each Local Resource Zone ("LRZ") relative to how much 3 capacity can be imported from other LRZs. In the event a load-serving entity's resources 4 fall short of those annual requirements, either in total or in-zone, that load-serving entity 5 is exposed to the zonal clearing price for MISO's annual capacity auction for that 6 shortfall, which clearing price can approach and ultimately reach the cost of new entry ("CONE") as market conditions tighten.¹¹ Notably, LRZs 1 through 7 cleared at or near 7 8 CONE in the 2022-23 MISO Planning Year Resource Auction, or \$236.66/MW-day.¹² 9 The same 2022-23 MISO Planning Year Resource Auction yielded a clearing price for 10 LRZ 9, the LRZ that ELL belongs to, of \$2.88/MW-day. As I noted, ELL's planning 11 efforts carefully consider the location of resources and the proximity of those resources to 12 customer load and therefore are aligned with these MISO zonal requirements. This 13 alignment serves to mitigate the level of exposure to capacity shortfalls and places an 14 emphasis on securing adequate in-zone resources.

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16 Q12. DOES THE COMPANY NEED ADDITIONAL LONG-TERM GENERATING 17 CAPACITY TO SATISFY ITS PLANNING OBJECTIVES?

A. Yes. Projected load (plus planning a reserve margin) exceeds the expected capacity of
 ELL's existing and LPSC-approved resources, which indicates a need for additional
 long-term capacity. As I noted in my recently filed testimony in Docket No. U-36685, a
 comparison of the load and resource assumptions from ELL's Business Plan 2022

¹¹ CONE represents the regional, annualized capital cost of building a new combustion turbine.

¹² 2022/2023 Planning Resource Auction (PRA) Results, MISO (April 14, 2022), available at https://cdn.misoenergy.org/2022%20PRA%20Results624053.pdf.

1		results in a projected capacity deficit during the planning horizon. ELL's Business Plan
2		2023 shows an even larger need for long-term capacity, which I will discuss further in
3		my future Direct Testimony that will accompany phase two of the Application in this
4		docket.
5		
6	Q13.	WHAT ARE ELL'S CURRENT PLANS TO MEET ITS LONG-TERM CAPACITY
7		NEEDS?
8	A.	As noted above, the Company has developed and continues to refine an integrated plan
9		that considers generation, transmission, demand response, and energy efficiency and is
10		expected to meet customer needs in the lowest-reasonable-cost manner. The Company
11		continues to need long-term capacity over the planning horizon, and the plan to meet
12		ELL's needs includes a combination of new-build generation, PPAs, and acquisitions
13		from a diverse set of resources that will provide efficient operating flexibility to serve
14		evolving customer demands. In recognition of the improving cost-effectiveness and
15		numerous benefits that renewable resources can provide, the analyses conducted in ELL's
16		two most recent IRP cycles identified a significant amount of solar additions as an
17		economic option to address ELL's near-term planning needs and provide customer
18		benefits.

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20 Q14. DO THE COMPANY'S REQUESTS IN THIS DOCKET ADVANCE THE 21 STRATEGIES OUTLINED IN THE DRAFT 2023 IRP?

A. Yes. As described in the action plan of the Draft 2023 IRP, ELL plans to seek sizeable
 and frequent tranches of renewable resources in an attempt to respond to customer

1 preferences, to increase the diversity of ELL's generation portfolio, to continue to 2 provide reliable electric service to its customers at the lowest reasonable cost, to 3 capitalize on the improving economics of solar and potentially other technologies relative 4 to conventional generation resources (e.g., a CCGT), and to work toward its 2030 and 5 2050 sustainability goals. This proposed strategy will add needed capacity and energy to 6 the grid to meet ELL's customers' projected capacity and energy needs, part of which is 7 driven by new customers and customers who are expanding their operations, thus 8 ensuring ELL can support new economic development in the region. Additionally, 9 ELL's Draft 2023 IRP also notes that in response to statements reflected in a Commission 10 Order, ELL will work with the Commission and other stakeholders to find ways to 11 expedite the RFP process, which the Company's Application in this docket, and the forthcoming testimony in phase 2, seeks to address directly. 12

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14 Q15. DOES THE RELIEF SOUGHT IN THIS DOCKET SUPPORT ELL'S THREE KEY 15 PLANNING OBJECTIVES FOR BUILDING THE TYPE OF SUSTAINABLE 16 PORTFOLIO NEEDED TO MEET THE NEEDS OF ELL'S CUSTOMERS?

A. Yes. In terms of reliability, the long-term planning and resource additions made over the past 5 years have served to meet the Company's long-term capacity needs I discussed above. In addition to the requests previously before this Commission, the need for incremental capacity and solar for customers continues to grow. Currently, ELL's renewable portfolio represents less than 3% of the total portfolio, so more resources are needed. Unlike some other Louisiana utilities seeking to add a significant amount of intermittent solar resources that are not supported by dispatchable physical generation,

ELL's existing portfolio of generation allows ELL to manage the intermittency of solar
 generation without risking reliability or shifting costs to customers of other utilities.

3 Regarding affordability, utility-scale solar has emerged as an economic 4 investment for our customers. However, the current nature of the solar market is rapidly 5 evolving and is subject to fluctuations. The requests made in this docket are aimed at 6 enabling ELL to add solar resources more quickly, thereby reducing the price risk that 7 exists because of these market fluctuations. When developers bid in ELL RFPs, they are 8 required to bid a price that they will hold through final execution of a contract. The 9 longer that period, and the greater the supply chain uncertainty, the more of a risk 10 premium they will add to their bids.

11 As far as environmental stewardship, ELL is only seeking zero-carbon-emitting 12 solar resources in this docket. The addition of these types of resources reduces ELL's 13 carbon emissions, and they are a critical step toward meeting customers' desires for a 14 lower-carbon resource portfolio.

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Q16. IN RESPONSE TO QUESTION 7, YOU STATED THAT ELL'S DEVELOPMENT OF
 A SUSTAINABLE PORTFOLIO EMPHASIZES CUSTOMER PREFERENCES. DO
 THE REQUESTS IN THIS DOCKET ADDRESS CUSTOMER PREFERENCES?

A. Yes. The proposals in this docket will enable ELL to meet customer demand for
renewable resources. ELL's customers, especially in the large commercial and industrial
sector, increasingly are seeking renewable options to meet their planning objectives, the
desires of their own customers, and the communities in the vicinity of their operations.
The 2021 Solar Portfolio approved by the LPSC in Docket No. U-36190 was a good first

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1	step towards integrating renewable resources into ELL's resource portfolio. As
2	demonstrated by the recently-filed 2022 Solar Portfolio in Docket No. U-36685, ELL is
3	continuing to add solar resources in response to customer demand. This customer demand
4	is evidenced by the interest in Rider GGO, which provides a direct method for customers
5	to address their preference for renewable options. The initial Rider GGO queue was fully
6	subscribed in minutes, and there is total interest in Rider GGO of approximately 2,000
7	MW, as compared to the current approximately 700 MW sourcing the rider. ¹³ There is
8	also additional evidence of customer interest in ELL acquiring renewable resources
9	beyond even the 2,000 MW of interest recently expressed in Rider GGO. ¹⁴ For instance,
10	two recent speakers at Commission Business and Executive sessions referenced either the
11	load growth, or the potential for load growth, that is tied to the ability of industrial
12	customers to decarbonize their operations. ¹⁵ The up to 3.0 GW (<i>i.e.</i> , 3,000 MW) sought in
13	this docket will therefore help support additional ELL green options to address the
14	additional customer interest that is not currently being met by ELL's Rider GGO
15	offering.

¹³ LPSC Order No. U-36190 approved a 475 MW portfolio that supports Rider GGO. See, Order No. U-36190, supra, note 3. On February 28, 2023, ELL filed a request for a certification that would add an additional 224 MW in support of Rider GGO, for a total of 699 MW. See, LPSC Docket No. U-36685, supra, note 4.

¹⁴ For example, on December 7, 2022, ELL and Cameron LNG announced a memorandum of understanding to negotiate a new electric service agreement to reduce Cameron LNG's Scope 2 emissions from the electricity it purchases from ELL. *Cameron LNG, Entergy Louisiana Advance Renewable Energy Service Agreement,* Entergy (December 7, 2022), *available at* <u>https://www.entergynewsroom.com/news/cameron-lng-entergy-louisiana-advancerenewable-energy-service-agreement/</u>. Additionally, a number of industrial decarbonization and low-carbon announcements are identified in the 2023 Annual Report from the State Climate Task Force. Those announced projects will likely require access to clean or low-carbon power. *See*, Office of the Governor, *Louisiana Climate Action Plan Annual Report,* Climate Initiatives Task Force (February 2023), p. 25, *available at* https://gov.louisiana.gov/page/climate-initiatives-task-force.

¹⁵ See, Bear, John, Testimony Transcript, Louisiana Public Service Commission Business and Executive Open Session (November 17, 2022), p. 7, In. 11-18, p. 9, In. 18-21; see also, Chambers, Terrence L., Mosing, Donald & Janice, Solar Energy for Louisiana, University of Louisiana Lafayette, p. 28, available at https://www.lpsc.louisiana.gov/docs/news/PSC%20-%20Solar%20Energy%201_18_23.pdf

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1		Increasing the number of renewable resources in Louisiana is beneficial to both
2		existing customers and potential new customers. In the subsequent filings that will be
3		made by ELL in this docket, the Company will submit further testimony and evidence
4		that demonstrates demand from existing customers for renewable resources located in
5		Louisiana, and from prospective customers for access to locally-sourced solar generation
б		as a prerequisite for choosing Louisiana for siting and investment.
7		
8	Q17.	WHAT OTHER BENEFITS WILL CUSTOMERS RECEIVE FROM WHAT THE
9		COMPANY IS PROPOSING THIS DOCKET?
10	A.	ELL's customers also will receive benefits beyond the ability to meet their own planning
11		objectives and sustainability goals through further solar resource additions to the ELL
12		portfolio. These benefits include projected energy savings and the ability of the solar
13		resources in ELL's overall resource mix to act as a hedge against natural gas prices,
14		which are notoriously volatile and often set the locational marginal price of electricity. As
15		I stated previously in my testimony, ELL has made investments in its resource fleet to
16		ensure that the addition of further solar resources, which are intermittent in nature, will
17		not jeopardize reliability. Therefore, ELL is able to take advantage of the energy savings
18		and environmental benefits of renewable resources on behalf of all its customers because
19		it has responsibly planned its portfolio.
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1III.CURRENT STATE OF SOLAR DEVELOPMENT IN LOUISIANA2Q18. HAVE THERE BEEN IMPEDIMENTS TO PREVIOUS SOLAR RESOURCE3ADDITIONS?

4 Α. Yes. In February 2022, a domestic solar manufacturer petitioned the US Department of 5 Commerce ("USDOC") to investigate whether solar panels imported from four Southeast 6 Asian countries (Malaysia, Thailand, Vietnam, and Cambodia) were circumventing 7 existing tariffs by using parts and components from China. Approximately eighty percent 8 (80%) of the solar panels in use for U.S. utility-scale solar installations, including the 9 panels planned for the Second Solar Portfolio, originate in those countries. On March 28, 10 2022, the USDOC announced its determination to investigate the allegations made in the 11 petitions. After the announcement, the importation of panels from these countries largely 12 stopped, and many new solar projects that were relying on those panels were cancelled or 13 placed on hold. The investigation has also increased the demand for, and price of, panels 14 sourced from manufacturers and geographic regions that do not have the potential to be 15 affected by the investigation.

In December 2022, the USDOC issued a preliminary finding that circumvention was occurring through each of the four Southeast Asian countries. This finding does not constitute a ban on imports from those countries; however, companies will be required to certify that they are not circumventing existing tariffs. As a next step, the USDOC will conduct audits to verify the information that was the basis of its finding, and all parties will have an opportunity to comment on the USDOC's finding before a final determination is made in May 2023.

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1	In addition, President Biden issued a Presidential Proclamation on June 6, 2022,
2	stating that duties will not be collected on any solar module and cell imports from those
3	four countries until June 2024, as long as the imports are consumed in the U.S. market
4	within six months of the termination of the President's Proclamation. Despite this
5	proclamation, the many months of uncertainty and turmoil in the market have continued
6	to cause supply issues and spiking prices that has left the solar market unstable in the near
7	term.

8. The U.S. government has also instituted import controls on products that originate
9 in whole or in part from the Xinjiang Uyghur Autonomous Region of China. This has
10 affected the importation of solar panels even beyond the effects of the USDOC
11 investigation referenced above.

Finally, concerns from some stakeholders at the local level also have constrained solar development in Louisiana. For example, two of the resources approved by LPSC Order No. U-36190 are facing uncertainty in St. James Parish. St. James Parish has instituted a moratorium on land use permits for new solar facilities, affecting both the St. Jacques and Vacherie solar facilities, which are awaiting final approval of local land use permitting.

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19 Q19. HOW HAVE THESE IMPEDIMENTS AFFECTED ELL'S SOLAR 20 DEVELOPMENTS?

A. These impediments were a primary driver, among other things, that resulted in the 2021
 RFP yielding only one proposal that moved forward to an application for certification.
 After ELL selected proposals, and reviewed those proposals with LPSC Staff,

1 negotiations on commercial agreements to bring the proposals to fruition began. The next 2 month, the USDOC investigation that I discussed previously in my testimony was 3 announced. The market upheaval caused by this investigation affected the selected 4 proposals, causing the negotiations to stall. Because of this, ELL conferred with the 5 Independent Monitor ("IM") to inquire about the option to reopen the RFP to allow for 6 refreshed pricing for the selected proposals. With the oversight of the IM, and after 7 consulting with the LPSC Staff, ELL notified all bidders of an extension of the RFP 8 deadlines to refresh their prices in light of the significant changes that the USDOC 9 investigation caused in the market. Additional analyses were conducted on the refreshed 10 proposals, and the results were presented to LPSC Staff. Despite the opportunity to 11 refresh pricing, many of the proposals selected did not come to fruition in terms of 12 executed contracts, and ELL was able to seek certification of only one proposal from the 2021 RFP.¹⁶ 13

Additionally, the development of the resources approved in LPSC Docket No. U-36190 was affected by the USDOC investigation during the pendency of that docket. This resulted in amendments to several of the underlying transactions during the pendency of the certification proceedings. While none of the proposed resources in that certification proceeding were withdrawn as a result of the volatility introduced by the USDOC investigation, there have been other impediments to developing those resources, as noted in my previous response.

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See, LPSC Docket No. U-36685, supra, note 4.

Q20. HOW HAS THE RFP PROCESS ITSELF AFFECTED THE ABILITY TO DEVELOP SOLAR RESOURCES?

The current RFP process has not been shown to encourage the development of solar 3 Α. 4 resources quickly and affordably. While solar is not a new or complex technology, rapid 5 growth in demand coupled with recent supply chain shocks have resulted in a volatile and 6 sensitive market over recent years. The current RFP process is lengthy, and this is 7 followed by an equally lengthy certification process, which together may add two years 8 to the time needed to acquire resources. Given the nature of the solar market, developers 9 are not able to provide and hold price certainty over the extensive period of the traditional RFP process and through LPSC certification. The long timeline of the RFP process 10 11 traditionally used to comply with the Commission's Market Based Mechanisms Order ("MBM Order"),¹⁷ combined with market volatility, has, in many instances, stalled 12 13 negotiations as bidders could not hold their initial prices, and, in some instances, this has 14 resulted in ELL seeking pricing refreshes, as I noted above.

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16 Q21. WHY MIGHT THE TRADITIONAL RFP PROCESS THAT HAS BEEN USED TO
17 COMPLY WITH THE MBM ORDER BE BETTER SUITED TO TYPES OF
18 RESOURCES OTHER THAN SOLAR?

A. Solar resources differ fundamentally from the types of resources that historically have
 been sought in RFPs. Namely, solar resources are much smaller and less complex and

¹⁷ See, General Order, Docket No. R-26172 Subdocket A, *In re: Development of Market-Based Mechanisms* to Evaluate Proposals to Construct or Acquire Generating Capacity to Meeting Native Load, Supplements the September 20, 1983 General Order, dated February 16, 2004 (as amended by General Order, Docket No. R-26172 Subdocket B, dated November 3, 2006, and further amended by the April 26, 2007 General Order, and the amendments approved by the Commission at its October 15, 2008 Business & Executive Meeting and now in General Order, Docket No. R-26172, Subdocket C dated October 29, 2008).

1 less risky to build, and each individual resource costs significantly less, as compared to a 2 In the past, ELL has sought large gas-fired resources that range from CCGT. approximately 350 MW to almost 1,000 MW and that range in cost from the low 3 4 hundreds of million to approximately \$900 million per resource.¹⁸ Utility-scale solar 5 resources can be much smaller, are less capital intensive, and can be placed in service 6 much quicker. Because of these factors, solar resources lend themselves to market tests 7 that are faster than what is generally possible under the RFP process traditionally utilized 8 to comply with the MBM Order.

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10 Q22. HOW DOES THE LPSC APPROVAL PROCESS AFFECT THE TIMELINE FOR 11 SOLAR DEVELOPMENT?

A. The entirety of the supply-side resource procurement process is far too long to facilitate
solar development under current market conditions. As previously discussed, the timeline
associated with the traditional RFP process can take a year, and, in some cases, more.
The LPSC approval process that occurs afterwards can take up to a year or more as well.
Table 2 below provides examples of recent solar additions in Louisiana:

¹⁸ See, e.g., LPSC Docket No. U-34472, In re: Application of Entergy Louisiana, LLC for Approval to Acquire Washington Parish Energy Center and for Cost Recovery; LPSC Docket No. U-33770, In re: Joint Application of Entergy Louisiana, LLC, Entergy Gulf States Louisiana, L.L.C., and Entergy Louisiana Power, LLC for Approval to Construct St. Charles Power Station, and for Cost Recovery; LPSC Docket No. U-34283, In re: Application of Entergy Louisiana, LLC for Approval to Construct Lake Charles Power Station, and for Cost Recovery; LPSC Docket No. U-31971, In re: Joint Application of Entergy Louisiana, LLC for Approval to Construct Unit 6 at Ninemile Point Station and of Entergy Gulf States Louisiana, LLC. for Approval to Participate in a Related Contract for the Purchase of Capacity and Electric Energy, for Cost Recovery and Request for Timely Relief.

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Table 2

LPSC Docket No.	Notice of Intent of RFP filed with LPSC	Certification Filing Date	Order Date	Days from Notice to Order	Nameplate Capacity
U-36190	11/18/2019	11/9/2021	10/14/2022	1061 days	475 MW
U-36685	1/8/2021	2/28/2023	N/A	794 days and ongoing ¹⁹	224 MW
U-35927	6/25/19	3/17/2021	1/28/2022	948 days	343.1 MW
U-35936	N/A ²⁰	3/18/2021	1/13/2022	301 days	750 kW
U-36133	2/27/2020	8/17/2021	11/10/2022	987 days	100 MW
U-36514	9/28/2020	8/29/2022	N/A	896 days and ongoing ¹⁹	25 MW ²¹
U-36515	9/28/2020	8/29/2022	N/A	896 days and ongoing ¹⁹	25 MW ²¹
U-36502	N/A ²⁰	08/03/2022	N/A	222 days and ongoing ¹⁹	240 MW
U-36259	2/26/2021	1/28/2022	10/14/2022	595 days	72.5 MW

As can be seen from the above table, the resources that were identified through the traditional RFP process took on average more than two years to progress from the beginning of the RFP through Commission certification. Even the resources that were not identified through the RFP process took nearly a year from the filing of the certification process until the issuance of an Order. While there is some variance in the dockets that may affect the RFP and certification timeline, like the number of intervenors and the amount of nameplate capacity, Table 2 shows that even dockets with no intervenors, like Docket No. U-36529, and dockets with smaller amounts of nameplate capacity, like Docket No. U-35936, take many months to progress to approval by the Commission. For

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¹⁹ As of March 13, 2023.

²⁰ The resources in these dockets were not selected through the traditional RFP process.

²¹ This represents the portion of the nameplate capacity for which approval is being sought in these dockets. The facility itself is 150 MW nameplate.

1			dockets that have multiple intervenors and feature large amounts of nameplate capacity,			
	2		like Docket Nos. U-36190 and U-35927, the timeline issues are exacerbated.			
	3					
ſ	4	Q23.	HAS ELL HEARD FROM STAKEHOLDERS A DESIRE TO EXPEDITE THE			
l I	5		CURRENT PROCUREMENT PROCESS FOR SOLAR GENERATION?			
	6	А.	Yes, that has certainly been the sentiment from multiple developers and industrial			
	7		customers looking to align their electric usage with renewable energy. The			
	8		Commission's Order No. U-36190 also contained statements urging a more-timely solar			
	9		procurement process:			
	10 11 12 13 14 15 16 17		We are at a point where the costs of utility-sale renewables are competitive supply resources, and we need to expedite our transition. This has been a long time in the making. Too long. These resources are from a 2020 RFP. I appreciated that Entergy is in the process of seeking renewable resources from 2021 and 2022 RFPs and ask Entergy and Staff to explore opportunities to expedite those requests as quickly as possible. ²²			
t	18	Q24.	ARE THE REQUESTS IN THIS DOCKET AIMED AT EXPEDITING THE SOLAR			
	19		DEVELOPMENT PROCESS?			
I	20	A.	Yes. The requests that will be made in this docket are made for the purpose of expediting			
	21		the processes that allow for solar development by ELL through a more efficient and			
ı	22		competitive process, while still preserving the Commission's jurisdiction over resource			
	23		adequacy. This will enable ELL to execute more quickly on solar resources that have			
	24		favorable economics and to provide the benefits of those resources to all customers in a			
	25		cost-efficient and timely manner. Expediting the processes for solar development, from			

See, LPSC Order No. U-36190, supra, note 3.

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1		beginning to end, means that the supply chain shocks and market fluctuations will have						
2		less of an effect on the developments. This may also result in a lower price for						
3		developments, as the pricing will need to build in less risk.						
4								
5		IV. <u>CONCLUSION</u>						
6	Q25.	WHAT IS ELL PROPOSING IN THIS DOCKET TO SOLVE THE ISSUES						
7		IDENTIFIED HERE?						
8	A.	In a later portion of this filing, ELL will propose an alternative process to the traditional						
9		RFP process, pursuant to the Commission's MBM Order which allows utilities to						
10		propose alternative market-based mechanisms or procedures, to secure up to 3,000 MW						
11		of capacity from solar resources through a streamlined, competitive process. A portion of						
12		the solicited resources will be used to expand the portfolio supporting Rider GGO. ELL						
13		also will be proposing a methodology for the acceleration of the approval of those solar						
14		resources, pursuant to the 1983 General Order. ²³ The alternative process will solicit						
15		resources via a competitive procurement process, but that process would occur after an						
16		Order is issued in this docket, and the timeline for the competitive procurement process,						
17		selections, and contract execution would enable faster project execution. Additionally,						
18		ELL will propose a new renewable tariff to provide customers with additional options to						
19		meet their needs.						

²³ See, LPSC General Order dated September 20, 1983 (In re: In the Matter of the Expansion of Utility Power Plant; Proposed Certification of New Plant by the LPSC), as amended by General Order (Corrected) in Docket No. R-30517 (In re: Possible modifications to the September 20, 1983 General Order to allow (1) for more expeditious certifications of limited-term resource procurements and (2) an exception for annual and seasonal liquidated damages block energy purchases) dated May 27, 2009.

Entergy Louisiana, LLC Direct Testimony of Laura Beauchamp LPSC Docket No. U-____

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1 Q26. DOES THIS CONCLUDE YOUR TESTIMONY?

2 A. Yes, at this time. I will have further testimony to support the proposal in this docket at a

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3 later time.

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AFFIDAVIT

STATE OF LOUISIANA

PARISH OF JEFFERSON

NOW BEFORE ME, the undersigned authority, personally came and appeared, LAURA BEAUCHAMP, who after being duly sworn by me, did depose and say:

That the above and foregoing is her sworn testimony in this proceeding and that she 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, she verily believes them to be

true.

____ Laura Beauchamp

SWORN TO AND SUBSCRIBED BEFORE ME THIS _____ DAY OF MARCH, 2023

OTARY PUBLIC LAGA 23770 of death My commission expires: ____

Listing of Previous Testimony Filed by Laura K. Beauchamp

<u>DATE</u>	<u>TYPE</u>	SUBJECT MATTER	<u>REGULATORY</u> <u>BODY</u>	<u>DOCKET</u> <u>NO.</u>
06/03/2011	Settlement	Little Gypsy Securitization	LPSC	U-31894
07/07/2011	Direct	Carville-Calpine 2011 PPA	LPSC	U-32031
09/16/2011	Settlement	EGSL Fuel Adjustment Clause (1995-2004)	LPSC	U-27103
12/21/2011	Rebuttal	Carville-Calpine 2011 PPA	LPSC	U-32031
01/26/2012	Settlement	Retail Effects of FERC Opinion Nos. 468 and 468-A and Related Orders	LPSC	U-31099
03/02/2012	Settlement	Carville-Calpine 2011 PPA	LPSC	U-32031
02/15/2013	Direct	EGSL Base Rate Case	LPSC	U-32707
02/15/2013	Direct	ELL Base Rate Case	LPSC	U-32708
03/28/2013	Direct	ELL-Algiers 2013 Rate Case	CCNO	UD-13-01
09/27/2013	Settlement	MISO Implementation	LPSC	U-32675
02/18/2014	Rebuttal	ELL-Algiers 2013 Rate Case	CCNO	UD-13-01
03/22/2019	Adopting	ENOL 2018 Rate Case	CNO	UD-18-07
06/06/2022	Adopting	ELL Solar Portfolio and Green Tariff	LPSC	Ú-36190
02/28/2023	Direct	ELL Solar CCN Application	LPSC	U-36685

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