BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

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

LAURA K. BEAUCHAMP

ON BEHALF OF

ENTERGY LOUISIANA, LLC

PUBLIC REDACTED VERSION

OCTOBER 2024

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EXHIBIT LIST

I. INTRODUCTION AND BACKGROUND

Q1. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Laura K. Beauchamp. I am employed by Entergy Louisiana, LLC ("ELL" or "the Company") as the Director, Resource Planning and Market Operations, a role I assumed in March 2022. My business address is 4809 Jefferson Highway, Jefferson, Louisiana 70121.

Q2. ON WHOSE BEHALF ARE YOU FILING THIS DIRECT TESTIMONY?

A. I am filing this Direct Testimony on behalf of ELL.

Q3. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. In 2000, I earned a Bachelor of Science in Management degree with a concentration in Finance, and in 2004 I was awarded a Master of Business Administration degree with a concentration in Energy Finance. Both of these degrees were granted by Tulane University's A. B. Freeman School of Business.

I have been employed by affiliates of Entergy Corporation since 2000 and have held various roles of increasing responsibility in Accounting, Finance, Regulatory, and Innovation. From 2009 through 2014, I served as the Manager of Regulatory Affairs for ELL and Entergy Gulf States Louisiana, L.L.C., a role in which I was responsible for providing regulatory support services to those utilities, including in rate proceedings and associated regulatory filings with the Louisiana Public Service Commission ("LPSC" or "the Commission"). Later, from 2016 through 2018, I served as the Finance

Director for ELL. From 2018 through 2022, I held roles as the Director of Utility Finance and Strategy for Entergy Services, LLC ("ESL")[1] and as Director of Innovation Strategy and Consulting at KeyString Labs, Entergy's customer innovation center. I also serve as an adjunct lecturer for the Tulane Energy Institute in the A. B. Freeman School of Business focusing on wholesale power markets.

Q4. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES.

A. As the Director of Resource Planning and Market Operations for ELL, I am responsible for managing the planning of generation, transmission, and wholesale power activities for ELL. This involves working closely with ESL's Power Development Organization.[2]

Q5. PLEASE DESCRIBE YOUR ROLE IN NEGOTIATING AND REACHING CONTRACTUAL TERMS WITH THE CUSTOMER AT ISSUE IN THIS APPLICATION.

A. There were numerous organizations across ELL and ESL that supported or engaged in negotiations with [redacted] (the "Customer"). My role was to lead the negotiation team while ensuring that subject-matter experts on various matters were consulted and included in the process to provide insight and guidance, to ensure compliance, and to

[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.

[2] ESL's Power Development Organization includes resource planning, generation construction and management, transmission planning, transmission construction and management, and separate market operations for transmission and generation as required to operate within the Midcontinent Independent System Operator, Inc. ("MISO").

help achieve a successful outcome with respect to providing service for the Customer's project, including by achieving a reasonable balance between the needs and interests of the Customer and those of the Company's other customers. I provided oversight and guidance throughout the negotiation process, from the earliest discussions through the execution of the relevant definitive agreements.

Q6. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?

A. Yes. A list of my prior testimony is attached as Exhibit LKB-1.

Q7. WHAT IS ELL SEEKING FROM THE COMMISSION IN THIS PROCEEDING?

A. The full extent of ELL's requests from the Commission is set forth in the Prayer for Relief in the Application. To summarize, however, ELL generally is seeking (1) certification of three new Combined Cycle Combustion Turbine ("CCCT") generators (the "Planned Generators"), two of which will be located next to the Customer's planned project in Richland Parish, Louisiana, and one of which will be sited within ELL's Southeast Louisiana Planning Region ("SELPA") at a specific site to be determined, (2) findings with respect to certain, related transmission facilities, (3) approval of the Corporate Sustainability Rider ("CSR") , and (4) specific rate-making treatment that accounts for, among other things, certain unique aspects of the Customer's contributions towards the referenced project.

II. CUSTOMER LOAD PROFILE AND OVERVIEW OF PROJECT

Q8. PLEASE DESCRIBE GENERALLY THE PROJECT AND THE RELATED AGREEMENTS THAT ARE AT ISSUE IN THE APPLICATION.

A. The underlying development at issue in the Application is a [redacted] megawatt ("MW") [redacted] to be constructed in Richland Parish, Louisiana (the "Project"). As Company witness, ELL President and Chief Executive Officer, Phillip May explains more fully in his Direct Testimony, the current expectations with respect to the Project are that the Customer will hire 300 to 500 full-time employees at an average salary of $82,000, representing potentially the most significant economic-development achievement for this portion of Northeast Louisiana in recent memory. Indeed, as Mr. May discusses in his Direct Testimony, the Project is anticipated to be economically transformative for Richland Parish and the surrounding area. As described by Mr. May, the addition of these well-paying jobs in Richland Parish will have significant benefits, both from the direct employment by the Customer as well as through the economic ripple effects experienced from an injection of such significant human and economic capital into a long-underdeveloped region.

The Project has significant capacity and energy requirements, and ELL and the Customer have worked closely to reach commercial terms on an Electric Service Agreement ("ESA") and related contracts that provide the power needed by the Customer while accounting for significant financial contributions from the Customer toward construction of the necessary incremental resources and achieving a result that—through the Customer's participation in a standard rate schedule and, correspondingly, participation in Rider FRP in generally the same manner as similarly

situated industrial customers—will have substantial, beneficial cost impacts to all ELL retail customers and other users of the ELL transmission system across Louisiana.

To serve this Customer's anticipated load and continue to reliably serve its existing customers, ELL will require, among other things, 2,262 MW of new baseload generation and significant transmission assets and upgrades. As described further below and throughout the Application and other supporting Direct Testimony, the planned new baseload generation consists in large part of three new CCCT generators, two of which will be located adjacent to the Customer's site in Richland Parish, and one of which will be located at another site that has yet to be determined but which will be located somewhere within SELPA. Company witness Matthew Bulpitt discusses these generation resources in more detail in his Direct Testimony.

With respect to the new transmission facilities, ELL anticipates constructing six new substations on the Customer's property and will need to interconnect those substations into the bulk power transmission system. ELL will also need to construct, among other things, a new 500 kilovolt ("kV") substation at Sterlington, Louisiana, and a new 500 kV transmission line extending from a substation near Sarepta, Louisiana, to a substation near Mt. Olive, Louisiana (referred to as the "Mount Olive to Sarepta Transmission Facilities"). Company witness Daniel Kline discusses these transmission projects in more detail in his Direct Testimony. These projects, and the others described in the Application and the supporting Direct Testimony, are being paid for primarily by the Customer through (1) an Agreement for Contribution in Aid of Construction and Capital Costs (the "CIAC Agreement"); and (2) the payment of charges for electric service through the Customer's participation in ELL's standard Large Load, High Load

Factor Power Service Rate Schedule ("Rate Schedule LLHLFPS-L"), which includes a minimum monthly charge. These arrangements ensure that the Customer is paying for both its incremental cost to serve during the term of the ESA as well as its share of ELL's embedded costs that will be used to serve this Customer. Certain components of the Project are expected to begin providing limited electric service for construction purposes in [redacted] before the entire Project ramps up to full capacity by [redacted].

Q9. PLEASE DESCRIBE IN MORE DETAIL THE CSR.

A. ELL and the Customer have also worked closely to reach an agreement, encompassed within the CSR, to achieve certain sustainability objectives of the Company, bolster the sustainability of ELL's overall system and resource mix for the benefit of all ELL customers, and advance an important consideration for the Customer in choosing to move forward with its investment in Louisiana. The CSR is a rider negotiated specifically for this Customer that includes, among other things, provisions for solar and/or solar and storage ("hybrid") resources as well as carbon capture and storage ("CCS") and potentially other clean resources. As discussed further below and in the Direct Testimony of Company witness Elizabeth C. Ingram, ELL is not seeking certification or approval for any specific clean resources addressed in the CSR at this time; rather, ELL is seeking, among other things, confirmation that it is able to procure 1,500 MW of solar and/or hybrid resources (in excess of the 3 GW of solar resources previously approved by the Commission) utilizing the alternative, streamlined, competitive procurement process approved in LPSC Order No. U-36697 (the "3 GW

Order")[3] as well as approval generally of the CSR, including the Customer's agreement to pay up to a certain amount specified in Section C of the CSR for CCS at ELL's Lake Charles Power Station ("LCPS") as a means to offset in part the emissions impacts from the three new CCCTs required for the Customer's Project.

Q10. [redacted]

HAVE THE COMPANY AND THE CUSTOMER TAKEN STEPS TO ADDRESS THIS POTENTIAL CONCERN?

A. Yes. The Company and the Customer have structured the arrangements for the Project in a manner that carefully balances the interests of the Customer and those of ELL's other customers. A key guiding principle of the Company's and the Customers' negotiations was that the addition of the Project should not have the effect of foisting costs onto ELL's other customers in a manner contrary to the public interest—and considering the benefits to those other customers. Recognizing that the Customer generally has a right to be served (if it wishes to be served and can pay for such service), but also that the addition of a load of the size of the Customer's Project has a significant

[3] As Ms. Ingram discusses in greater detail in her Direct Testimony, ELL and the Customer have also expressed their intent and willingness to pursue alternative procurement and certification processes agreed to between the parties, if appropriate under the circumstances, and subject to any necessary LPSC approvals.

effect on the Company's electric system and drives significant incremental resource needs, the Company and the Customer have worked carefully, over a period of months, to structure the terms of the relevant agreements to strike a reasonable balance. As explored in detail in the Direct Testimony of Company witness Ryan Jones, the resulting terms, including the CIAC Agreement, the minimum monthly charge, and the application of ELL's filed rates, including Rider FRP, has significant benefits for ELL's other customers over the term of the ESA and, relative to a scenario where the Customer were to choose not to locate its Project here, is expected to save ELL's customers hundreds of millions of dollars in the form of reduced rates over that period. These benefits are augmented by the transformative economic development benefits created by locating the Project in an area of Louisiana that has long struggled economically. A critical objective of both ELL and the Customer was to craft the ESA and other rate terms to ensure that Louisiana is viewed as an attractive place to do business—and is open to new business that entails significant new investment in the State and the associated benefits for the people of the State—while protecting the interests of ELL's current customer base and ensuring their continued access to power that is affordable, sustainable, and reliable.

Q11. YOU SUMMARIZED THE TRANSMISSION-RELATED FACILITIES THAT ARE RELATED TO THE PROJECT. WOULD YOU PLEASE SPECIFY THE TRANSMISSION-RELATED PROJECTS BEING BUILT IN CONNECTION WITH THE PROJECT AND HOW THE CUSTOMER IS CONTRIBUTING TO THESE COSTS?

A. Yes, and it is helpful to divide these transmission-related projects into three categories: (1) substations, (2) projects that are located at the point of delivery or are being constructed to accommodate this Customer's load, or both, and (3) Transmission Facilities[4] that are system improvements. As to the first category, there are four substation projects presented in the Application: the Car Gas Substation, the Smalling Substation, the six substations on the Customer's property (referred to as the Customer 1 through 6 substations), and upgrades to the equipment at the Sterlington 500 kV Substation. The Car Gas Substation, Smalling Substation, and Customer 1 through 6 substations all will be paid for completely by the Customer through its CIAC Agreement, and I refer to those throughout this testimony as the "Customer-Paid Substations." The Sterlington 500 kV Substation Equipment is a "System Improvement" (within the meaning of the Company's Terms and Conditions of Electric Service (the "Terms and Conditions") and policies addressing line extensions) and is thus not being funded by the Customer alone, though the customer will bear its allocated share of this investment through the Formula Rate Plan ("FRP").

As to the second category, there are two components: the "Perryville-to-Smalling 500 kV Lines #2 and #3"[5] and the transmission lines that are connecting the Smalling Substation to each of the Customer 1 through 6 substations. Both of these components are being financed entirely by the Customer through its CIAC Agreement, and I refer to them as the "Point-of-Delivery Transmission Facilities."

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[4] The capitalized phrase "Transmission Facilities" is intended to have the meaning assigned to that phrase in the Commission's General Order R-36199 dated September 10, 2024 (the "Transmission Siting Order").

[5] Because of space constraints at Perryville, the line segments actually run from Perryville to Car Gas and then to Smalling.

The final category is defined as the Mount Olive to Sarepta Transmission Facilities and consists of a 500 kV transmission line from the Sarepta Substation to the Mount Olive Substation and a second autotransformer to be constructed at the Mount Olive Substation. The Mount Olive to Sarepta Transmission Facilities are needed for compliance with North American Electric Reliability Corporation ("NERC") regulations governing transmission planning and reliability and are System Improvements for which the Customer is not funding the associated cost, either directly or through revenue justification under its ESA, though the Customer will bear its allocated share of this investment through the FRP.

Finally, the Customer will require certain distribution and transmission facilities for immediate service, prior to completion of the Point-of-Delivery Transmission Facilities and the Mount Olive to Sarepta Transmission Facilities. These facilities, which I refer to as the "Interim Transmission Facilities," have a cost of approximately [redacted] and are being funded solely by the Customer through its CIAC Agreement.

Q12. PLEASE EXPLAIN HOW THE CUSTOMER WILL PAY ITS ALLOCATED SHARE OF THE TWO SYSTEM IMPROVEMENT PROJECTS, WHICH ARE THE STERLINGTON 500 KV SUBSTATION EQUIPMENT AND THE MOUNT OLIVE TO SAREPTA TRANSMISSION FACILITIES.

A. Although the Customer is not the *sole* source of funding for certain of these transmission projects, it is important to recognize that the Customer is taking service under the standard Rate Schedule LLHLFPS-L, which entails full participation in the FRP and, thus, full participation in bearing a proportionate share of all fixed and

variable costs included in those rates payable by all ELL customers. As Mr. Jones explains more fully in his Direct Testimony, based on the size and characteristics of its Project, the Customer is expected to pay, on its own, for approximately [redacted] of all of costs that are recovered within the FRP through the charges for its electric service. Moreover, it is expected that the Customer will contribute more than $[redacted], or approximately $[redacted] per year, toward costs that, but for this Customer would be borne by others through the FRP. Thus, while the Customer is not the *sole* source of funding for the Sterlington 500 kV Substation Equipment and the Mount Olive to Sarepta Transmission Facilities, it is contributing a substantial amount to those system facilities, as well as to the cost of all other assets in ELL's generation and transmission portfolios.

Q13. YOU HAVE MENTIONED THE ESA AND CIAC AGREEMENT A FEW TIMES NOW. WHAT ARE THOSE DOCUMENTS?

A. The ESA, which is attached hereto as HSPM Exhibit LKB-2, is the Electric Service Agreement pursuant to which the Customer is taking electric service from ELL, and the CIAC Agreement, which is attached hereto as HSPM Exhibit LKB-3, is the agreement setting forth the Customer's obligations with respect to providing funding toward the construction of the new infrastructure required as a primary result of the Project.

Q14. PLEASE DESCRIBE THE KEY TERMS OF THE ESA.

A. The ESA itself is a multi-part document that consists of the actual ESA accompanied by various attachments. The attachments are the Company's standard Terms and Conditions, Rate Schedule LLHLFPS-L, Rider 1 to the ESA, two contracts titled Contribution in Aid of Procurement and Engineering (one dated June 5, 2024, and one dated June 7, 2024), and the CIAC Agreement. Article I of the ESA itself sets forth the Original Term of the agreement, which runs from December 1, 2026, through November 30, 2041 (subject to my Direct Testimony below about the changes made by Rider 1 with respect to the effective date), and provisions concerning renewals of the ESA. Article II sets forth the number of kilowatts to be made available to the Customer as well as the relevant voltage and points of delivery. Article III provides that the Customer is taking service under Rate Schedule LLHLFPS-L and also lists certain rate and rider schedules to which the Customer has agreed to be bound. Article IV provides that Rider 1 is incorporated into the ESA, and Article V makes clear that the ESA is governed by ELL's standard Terms and Conditions.

Q15. WHAT ARE THE RENEWAL PROVISIONS IN THE ESA?

A. As I mentioned, the Original Term of the ESA runs through November 30, 2041. The ESA provides that the term automatically renews for 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 use best efforts to provide such notice twenty-four months in advance of termination.

Q16. YOU REFERENCED THAT RATE SCHEDULE LLHLFPS-L IS ATTACHED AND INCORPORATED INTO THE ESA. PLEASE EXPLAIN THE KEY TERMS OF THAT RATE SCHEDULE.

A. Rate Schedule LLHLFPS-L is a Commission-approved rate schedule that is open to any customer seeking to take not less than 70 MW of firm load with facilities operating with at least an 80% average monthly electric load factor. Rate Schedule LLHLFPS-L includes a provision governing how the customer's "Minimum Charge" is calculated, and the components of that Minimum Charge generally are the "Demand Charge" as applied to the "Demand Billing Determinants" for the current Month, plus any adjustments.

Q17. THE NEXT ATTACHMENT TO THE ESA IS RIDER 1. WHAT IS RIDER 1?

A. Rider 1 to the ESA includes certain additional, specific terms relating to, among other things, the Minimum Charge paid by the Customer. Section 2 of Rider 1 updates the effective date of the ESA and provides that the effective date will be the later of December 1, 2026, Commission approval of the "System Generation Capacity Upgrades" (as that term is defined in the CIAC Agreement),[6] or completion of the first phase (and partial energization of) the Smalling Facility. Rider 1 also provides that the Customer has agreed to fund [redacted]

[6] As detailed by Company witness Joshua Thomas, this limitation on the effective date of the ESA is required to comply with Rule 3 regarding ESAs with industrial customers requiring significant resource additions from the LPSC General Order dated July 29, 2019 ("Industrial Load Rule").

[redacted] (as that term is defined in the CIAC Agreement), during the term of the ESA. The costs the Customer is agreeing to fund partially through its Minimum Charge are referred to as the "Capital Costs" and are estimated in Rider 1 to be $4,031,258,652.

Rider 1 also incorporates the CSR into the ESA and includes other, relevant terms, including terms governing default and associated remedies, collateral-security and insurance requirements, and the Customer's entitlement to "Environmental Attributes," as defined in Rider 1.

Q18. YOU REFERENCED TWO CONTRIBUTIONS IN AID OF PROCUREMENT AND ENGINEERING. HAS THE CUSTOMER ALREADY PAID AMOUNTS FOR CERTAIN LONG-LEAD ITEMS?

A. Yes, both of those agreements contemplate payments by the Customer for work defined in each agreement as the "Front-End Loading Work." As discussed further in the Direct Testimony of Mr. Bulpitt, in the agreement dated June 5, 2024, the Customer agreed to pay (and has since paid) [redacted] to reserve certain long lead time items related to the construction of the Smalling Substation and in the agreement dated June 7, 2024, the Customer agreed to pay (and has since paid) [redacted] to reserve certain long lead time items related to the construction of the Planned Generators.

Q19. LASTLY, PLEASE DESCRIBE THE CIAC AGREEMENT.

A. The CIAC Agreement is the agreement through which the Customer has agreed to make certain cash contributions to fund the construction of certain transmission-related facilities (defined in the CIAC Agreement as the "Work") as well as [redacted]

[redacted]. In all, the Customer has agreed to pay directly an estimated amount of [redacted] over the course of the payment schedule included with the CIAC Agreement (and after giving credit for the long-lead items paid through the two agreements discussed above that are titled Contribution in Aid of Procurement and Engineering).

Q20. DOES THE ESA, INCLUDING ITS ATTACHMENTS, INCLUDE PROVISIONS CONCERNING COLLATERAL TO SECURE THE CUSTOMER'S PERFORMANCE?

A. Yes. As Mr. May testifies in his Direct Testimony, both Rider 1 and the CIAC Agreement include provisions with respect to collateral security.

Q21. TURNING BACK TO THE SPECIFIC COMPONENTS OF THE PROJECT, DOES ELL CURRENTLY HAVE THE CAPACITY AVAILABLE TO SERVE THE CUSTOMER'S ANTICIPATED LOAD?

A. No. In fact, the Customer's projected demand of [redacted] MW translates, in terms of energy consumption, to an approximately [redacted] increase over the amount of terawatt hours ("TWh") currently sold annually by ELL statewide. The Customer's Project will require 2,262 MW of new baseload generation, additional purchased capacity, and substantial transmission upgrades.

Q22. COULD ELL SERVE THIS CUSTOMER'S PROPOSED LOAD THROUGH TRANSMISSION ALONE?

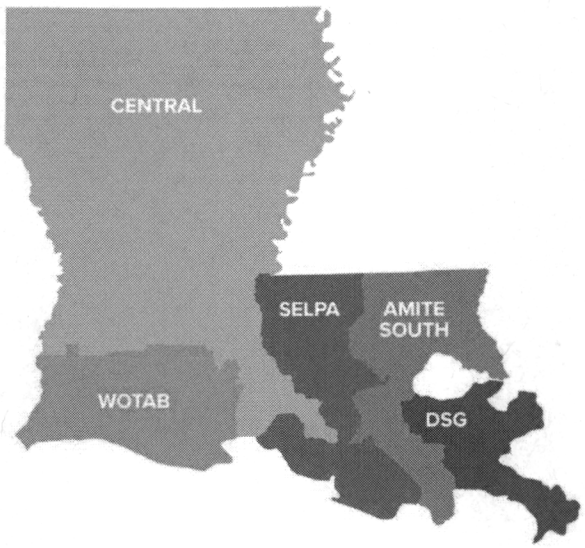
A. No. As I explain further below, and as discussed more fully by Mr. Kline, ELL has performed a diligent analysis of its current resource portfolio and the resources available through the market, and there is not enough capacity available to serve this Customer without constructing new generation.

Q23. HOW DOES ELL PROPOSE TO PROVIDE THE NEW BASELOAD GENERATION REQUIRED FOR THIS PROJECT?

A. ELL proposes to construct three new CCCTs to provide the 2,262 MW of new baseload generation. Two of those new CCCTs will be located adjacent to the site of the Customer's Project in Richland Parish. The third CCCT would be located at a site within ELL's SELPA. ELL has not yet identified the exact location within SELPA for this third CCCT; once the specific location is identified, ELL will supplement this Application.

Q24. YOU HAVE MENTIONED SELPA A FEW TIMES IN YOUR TESTIMONY. PLEASE DESCRIBE SELPA.

A. SELPA stands for the Southeast Louisiana Planning Area, which is one of the five overarching planning areas used by ELL for planning resource needs in Louisiana. SELPA includes the Amite South planning area, and Amite South further includes the planning area known as Downstream-of-Gypsy ("DSG"). A map of Louisiana reflecting the five planning areas is reproduced below:



For context, the two new CCCTs proposed in connection with the Project that would be located adjacent to the Customer's site are in the Central Planning Area. The third CCCT would be located in SELPA, including potentially the Amite South subregion, which are the blue- and green-shaded regions to the immediate southeast of the Central Planning Area. As I testify further below, ELL proposes to site the third CCCT in SELPA (including potentially Amite South) to assist with replacing energy that currently tends to flow from North Louisiana to the population and load centers in Southeast Louisiana and that, with the addition of the Customer's large Project load, instead generally would be used for supplying the needs of that Project.

Q25. TURNING TO THE PROJECT'S GENERATORS SPECIFICALLY, WHAT IS A CCCT?

A. A CCCT is a highly efficient generator that burns natural gas to provide both baseload and dispatchable power. Mr. Bulpitt discusses the mechanics of CCCTs (including the

ability of a CCCT to co-fire hydrogen and thus avoid carbon emissions, and that the CCCTs will be CCS-enabled) more completely in his Direct Testimony, but CCCTs provide efficient, around-the-clock, reliable generation using a fuel supply (natural gas) that produces far fewer carbon and other emissions than legacy fuel sources such as coal. Company witness Nicholas Owens also discusses in detail the reasons for selecting CCCTs to serve this Customer's projected load.

Q26. WHAT IS THE EXPECTED OUTPUT OF EACH OF THE PLANNED GENERATORS, AND WILL ALL THE OUTPUT BE DEVOTED TO THIS CUSTOMER?

A. Each of the three new CCCTs is expected to have a nameplate capacity of 754 MW. As to whether the output from the new CCCTs will be devoted to the Customer, the new CCCTs are being built to serve ELL's total load in the future, which will include the load of this new customer. These three new CCCTs will be a part of ELL's overall generation-resource portfolio, and ELL is seeking approval of the CCCTs as system resources. ELL anticipates that, as system resources, these CCCTs will be committed and dispatched in the normal order, consistent with security constrained economic unit commitment and dispatch, to serve the needs of all ELL customers, as is the case with other system resources.

Q27. YOU TESTIFIED THE CUSTOMER'S DEMAND IS ANTICIPATED TO BE [redacted] MW AND THAT ELL IS PROPOSING TO CONSTRUCT 2,262 MW OF NEW BASELOAD GENERATION, CONSISTING OF THREE CCCT GENERATORS

THAT EACH HAVE A NAMEPLATE CAPACITY OF 754 MW. [redacted]

A. ELL is continuing to evaluate all possible options with respect to providing the additional [redacted] of capacity and associated energy that is needed as of the date in [redacted] on which Customer's Project is expected to be fully operational. ELL expects its current resource portfolio will be able to supply part of the [redacted] especially if the transmission-related facilities proposed for the Project are approved. [redacted] ELL will either supplement this Application or seek any required Commission certifications and approvals in a subsequent filing.

Q28. YOU TESTIFIED THAT THE CUSTOMER'S PROJECT IS EXPECTED TO BE FULLY OPERATIONAL IN [redacted]. WHAT IS THE ANTICIPATED RAMP-UP TIMELINE FOR THE CUSTOMER'S DEMAND?

A. The below chart graph containing highly sensitive protected materials ("HSPM") provides a helpful illustration that is responsive to this question. The x-axis represents various month-and-year designations, and the y-axis reflects the total MW demand.

The orange bars represent the anticipated Customer Ramp, whereas the blue bars reflect ELL's load-serving capability[7] with respect to the Customer's Project.

HSPM CHART 1

[redacted]

As can be seen from the bar chart, the anticipated ramp-up in megawatts for this Customer consists of [redacted]

[7] Load-serving capability refers to ELL's technical capability to serve load and should not be interpreted to be the same as ELL's need for capacity for MISO/resource-adequacy purposes.

[redacted]

[redacted]

These estimates are based on the best currently available information (including, for example, information based on lead times) and are subject to refinement. Moreover, the ramp-up information is based on information provided to ELL by the Customer earlier this year.

Q29. WHAT WILL ELL DO IF THE CUSTOMER'S TIMELINE CHANGES FOR ITS COMMERCIAL OPERATION DATE?

A. As noted, the above bar chart is based on the best information available as well as information provided by the Customer in March of this year, and the timeline is therefore subject to refinement and change. If the Customer's expected date for commercial operation changes, ELL will work with the Customer to accommodate their new date and have power available when and as needed.

III. RESOURCE PLANNING

Q30. BEFORE TALKING FURTHER ABOUT THE SPECIFIC NEEDS FOR THE PROJECT CONTEMPLATED BY THE APPLICATION, PLEASE EXPLAIN THE GOAL OF ELL'S RESOURCE PLANNING.

A. ELL's resource planning is driven by the fundamental goal to deliver a resource portfolio that is centered on customer outcomes and the safe, reliable delivery of electricity at the lowest reasonable cost. Building a robust 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 portfolio development places an emphasis on customer needs and 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 today and in the future.

Q31. PLEASE ELABORATE ON THE THREE KEY OBJECTIVES YOU MENTIONED 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 more than just supplying a certain number of megawatts or zonal resource credits. Resource adequacy must consider the diversity of the supply portfolio—both in technology type and operational characteristics—combined with customer-targeted energy efficiency and demand-side resources. It also must consider the location of resources, proximity of those resources to customer load, and the availability of those resources under various conditions. The ability of the transmission and distribution system to deliver those resources to customers also is a key aspect of maintaining

reliability, and the careful integration of generation, transmission, and distribution ensures that this reliability can be delivered at the lowest reasonable cost.

Affordability as a planning objective means keeping customer costs reasonable, considering current and expected cost impacts of infrastructure improvements made on behalf of our customers and taking advantage of scale to provide cost synergies. ELL recognizes the importance of maintaining affordable rates for customers and prides itself on the ability to maintain rates well below the national average. This requires balancing of various cost components such as capital investment, operations and maintenance expense, and fuel costs. Cost stability requires that ELL examine its portfolio over a 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' desire for decarbonization through lower emission generation, local renewables, and offerings that allow customers to meet their own sustainability goals in partnership with their utility. ELL's customers, including the Customer at issue in this Application, have publicly stated their intent to reduce the carbon intensity of their operations. With our ability to provide broad access to customers, ELL stands in a

unique position to enable and extend a lower carbon economy to customers and the communities it serves.

Appropriately balancing these three objectives with consideration of the near-term and long-term risks associated with each results in the lowest reasonable cost portfolios for customers.

Q32. PLEASE DESCRIBE ELL'S LONG-TERM RESOURCE-PLANNING PROCESS.

A. The core elements of ELL's resource-planning process are: (1) a determination of the capability of the Company's current resources, (2) a forecast of the peak load plus reserve margin and energy that the Company expects to serve over the planning horizon, and (3) a determination of the amount and types of additional supply-side and demand-side resources that will be needed to meet the Company's load and energy requirements.

As part of its resource-planning efforts, ELL has developed and continues to refine an Integrated Resource Plan ("IRP"), which is filed at the LPSC pursuant to the Commission's IRP rules.[8] ELL's most recent submission of an IRP to the Commission was on May 22, 2023 (ELL's "Final 2023 IRP") and reflects inputs and assumptions that were established based on ELL's Business Plan 2022.[9] Given the uncertainty and fluidity inherent in long-term resource planning, ELL's IRP provides a framework for

[8] *See* Corrected General Order No. R-30021 (April 20, 2012), *Ex Parte, In re: Development and Implementation of Rule for Integrated Resource Planning for Electric Utilities*, Docket No. R-30021.

[9] *See* ELL's IRP Final Report (May 22, 2023), *Ex Parte: In re: 2021 Integrated Resource Planning Process for Entergy Louisiana, LLC Pursuant to the General Order No. R-30021*, Docket No. I-36181. The Final 2023 IRP was acknowledged by the LPSC on February 21, 2024.

the Company to plan for resources over the next several years but does not and cannot reasonably serve as a prescriptive plan to address ELL's long-term generation needs and options for meeting those needs. Circumstances will necessarily change, and to be reasonable and prudent, resource-procurement decisions must be made based on the best information reasonably available at the time those decisions are made. ELL presents those decisions and the support for them to the Commission when seeking resource certifications required under applicable General Orders and does not seek certification via the IRP (nor, per my understanding of the Commission's IRP rules, does the Commission's acknowledgment of an IRP confer such approval).

Further, an overarching consideration in ELL's long-term resource-planning process is the current expectation with respect to load growth and the generation portfolio. As described in detail in ELL's Final 2023 IRP, the record of Commission Docket No. U-36190 (in which the Commission approved ELL's 2021 Solar Portfolio),[10] and ELL's applications and testimony in Docket Nos. U-36685, U-36697, and U-37071, 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.

ELL also has presented the Commission with results of certain aspects of its continuous resource-planning efforts outside of the formal IRP process. For example, ELL received LPSC approval in 2022 for its 2021 Solar Portfolio, which consisted of four solar photovoltaic resources with a total nameplate capacity of 475 MW as well as

[10] *See* 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.

ELL's Geaux Green Option green tariff.[11] Further, on January 24, 2024, the LPSC approved ELL's 2022 Solar Portfolio, which consists of two solar photovoltaic resources with a total nameplate capacity of 224 MW.[12] The Company also recently received approvals from the Commission in Docket No. U-37071 (which concerned ELL's 2023 Solar Application, specifically the PPA for the Mondu Solar Facility) and Docket No. U-36697 (which was ELL's 3 GW filing).[13]

Finally, there are instances in which ELL's resource-planning process addresses (but the IRP may not contemplate) unique load-serving issues and solutions that arise from time to time—an issue that is especially the case here, where the Customer has proposed a large load, and the proposal was received by ELL after the latest IRP was filed. The Customer first approached ELL in January of 2024; thus because ELL was not aware of the potential for this Customer's new load until 2024, ELL could not have included the proposed load in its latest IRP, which was filed in 2023. Even more, the proposed load is significant, and the unique nature of such a large load requires a solution that is highly dependent on location and the customer's specific service requirements. Under these circumstances, ELL was unable to include the proposed

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[11] *Id.* The facilities were (1) the Sunlight Road Facility, (2) the Vacherie Facility, (3) the Elizabeth Facility; and (4) the St. Jacques Facility.

[12] *See* Application of Entergy Louisiana, LLC (February 28, 2023), *Ex Parte: Application of Entergy Louisiana, LLC for Approval of the 2022 Solar Portfolio, Expansion of the Geaux Green Option, Cost Recovery and Related Relief,* Docket No. U-36685. The resources at issue in that docket are the Iberville Facility and the Sterlington Facility.

[13] *See* Order No. U-37071 (September 6, 2024), *In re: Application for Approval of the Mondu Solar Power Purchase Agreement, Expansion of the Geaux Green Tariff, and Cost Recovery*, Docket No. U-37071; Order No. U-36697 (June 14, 2024), *In re: 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-36697.

load (or the corresponding solution) in its IRP and is instead fulfilling the Commission's planning requirements by seeking certification of certain resources in this Application.

Q33. PLEASE DESCRIBE THE COMPANY'S CURRENT RESOURCE PORTFOLIO.

A. ELL controls approximately 11 GW of in-service capacity through direct ownership, capacity contracts with third parties, life-of-unit contracts with other EOCs, and Demand Response Resources. Over the last nearly twenty years, ELL has transformed and modernized its generation portfolio to support existing customers' needs and address significant current and expected industrial load growth in Louisiana by adding reliable and more efficient combustion turbine ("CT") and CCCT generating units to meet its supply needs. More recently, and as I noted above, ELL has begun its transition to more renewable resources, including:

- the 50 MW Capital Region Solar facility in Port Allen, Louisiana, a PPA that commenced in 2020;
- a 475 MW solar portfolio that consists of 4 solar resources to be developed in the State of Louisiana, which the LPSC approved in 2022;[14]
- an additional 224 MW of solar resources to be developed in Louisiana that the Commission approved in January 2024; and
- a 100 MW PPA from the Mondu Solar facility.[15]

[14] Two of these four solar resources—the Vacherie and St. Jacques Facilities, located in St. James Parish, Louisiana—have experienced challenges to their development arising primarily from local permitting issues. The resources were nonetheless approved by the LPSC in 2022. The other two resources—the Sunlight Road Facility and Elizabeth Facility—have been developed and are either online or will be online soon.

[15] ELL also received approval from the LPSC through the 3 GW Order to procure an additional 3 GW of renewable resources and has issued its first RFP for resources under that order.

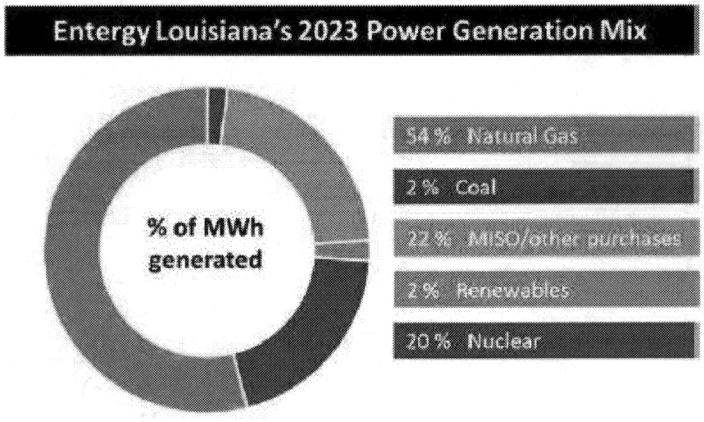
Table 1 below shows ELL's current (as of 2024) resources by fuel type, including demand-side resources and supply-side resources owned by ELL and under contract through PPAs.

Table 1

2024 ELL Resource Portfolio		
	Summer Seasonal Accredited Capacity ("SAC")	**SAC %**
Coal	361	3.3%
Nuclear	1,722	15.6%
CCCT	5,393	48.8%
CT and Other	761	6.9%
Legacy Gas	2,387	21.6%
Renewable	159	1.4%
Load Modifying Resources ("LMRs")	260	2.4%
Total	11,043	100.0%

Figure 1 below shows ELL's energy mix in 2023 by generation type.

Figure 1



Approximately 22% of the capacity in the Company's current resource portfolio is composed of legacy generation units that have been in service for more than 49 years, with the oldest having been in operation for 58 years. While the Company has made and will continue to make investments to maintain these generators when economical to do so, many of these generators are expected to reach the end of their economically useful lives and be deactivated within the next seven years.[16]

Q34. 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 ELL's customers in Louisiana. In doing so, ELL must also account for the resource adequacy requirements set out by MISO for the Planning Year to ensure that the results of ELL's planning efforts meet those requirements.

While MISO has no responsibility to build or provide capacity, it nevertheless assigns resource adequacy requirements to load-serving entities in its footprint, including ELL. MISO historically provided annual resource adequacy requirements but now has implemented its new Seasonal Accredited Capacity ("SAC") construct, beginning with the 2023-2024 planning year. For this new resource adequacy

[16] For example, ELL deactivated Waterford 1 during the first quarter of 2021. *See* Docket No. ELL's Compliance Filing (March 30, 2022), *In re: Notification of Deactivation and Retirement Decisions Pursuant to Louisiana Public Service Commission's Deactivation General Order (Docket No. R-34407)*, Docket No. X-35751; *see also, e.g.*, ELL's IRP Final Report (May 22, 2023), *Ex Parte: In Re: 2021 Integrated Resource Planning Process for Entergy Louisiana, LLC Pursuant to the General Order No. R-30021 Dated April 20, 2012*, Docket No. I-36181, p. 27.

construct, MISO has conducted seasonal assessments to evaluate potential resource adequacy risks for the various seasons. These assessments evaluate seasonal loss-of-load risk by modeling near-term capacity in the face of historic outage conditions and by modeling a wide range of potential load-forecast and weather scenarios, including extreme weather scenarios. The assessments also highlight potential issues in the upcoming seasons to help system operators and stakeholders prepare for potentially strained system conditions and develop preventative actions.[17]

As part of its resource adequacy requirements, MISO also determines how much capacity must be located within each Local Resource Zone ("LRZ") (as defined by MISO) relative to how much capacity can be "imported" from other LRZs. In the event a load-serving entity's resources fall short of those seasonal requirements, either in total or in zone, that load-serving entity is exposed to the zonal clearing price for MISO's annual capacity auction for the shortfall, which clearing price can approach and ultimately reach the cost of new entry ("CONE") as market conditions tighten.[18] Notably, LRZs 1 through 7 cleared at or near CONE, or $236.66/MW-day, in the 2022-23 MISO Planning Resource Auction ("PRA").[19] The same 2022-23 MISO Planning Resource Auction yielded a clearing price for LRZ 9—the LRZ in which ELL's load and generation are sited—of $2.88/MW-day.[20]

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[17] MISO Energy, *Resource Adequacy*, Midcontinent Independent System Operator, Inc., *available at* https://www.misoenergy.org/planning/resource-adequacy2/resource-adequacy.

[18] The "cost of new entry" represents the regional, annualized capital cost of building a new combustion turbine.

[19] MISO Energy, *2022/2023 Planning Resource Auction (PRA) Results*, Midcontinent Independent System Operator, Inc. (April 14, 2022), *available at* https://cdn.misoenergy.org/2022%20PRA%20Results624053.pdf.

[20] *Id.*

The PRA Results for the 2023-2024 MISO Planning Year, released in the spring of 2023, represent the first time MISO has released PRA results based on its new SAC construct. Results for the 2024-2025 MISO Planning Year, the most recent PRA, resulted in clearing prices that were flat across the region, except for Fall and Spring in Zone 5 (Missouri), where resource retirements and seasonal outages resulted in inadequate capacity and, correspondingly, prices in LRZ 5 that cleared in the Fall and Spring at seasonal CONE. Across the MISO region as a whole, receding surplus, coupled with emerging risks due to fleet transition and new load additions, continue to pressure resource adequacy. While LRZ 9 did not clear at CONE in any season, tightening was noted in LRZ 9 in the Spring season, which cleared at $34.10/MW-day, and in Winter, which cleared at $30.00/MW-day.[21] LRZ 9, in which Louisiana sits, has experienced elevated pricing in the most recent MISO PRAs and continues to see elevated pricing.[22]

As I noted, ELL's planning efforts carefully consider the location of resources and the proximity of those resources to customer load and therefore are aligned with these MISO zonal requirements. This alignment serves to mitigate ELL customers' level of exposure to capacity shortfalls and places an emphasis on securing adequate in-zone resources.[23]

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[21] MISO Energy, *Planning Resource Auction Results for Planning Year 2024-25,* Midcontinent Independent System Operator, Inc. (April 25, 2024), *available at* https://cdn.misoenergy.org/2024%20PRA%20Results%20Posting%2020240425632665.pdf.

[22] *Id.* at p. 4.

[23] It warrants further mentioning that to help ensure there are adequate in-zone resources, ELL is both siting three new CCCT generators in LRZ 9 and also requiring in Section B(2)(a) of the CSR that the "Designated Renewable Resources" procured through the CSR are directly interconnected to LRZ 9.

Q35. INDEPENDENT OF THE CUSTOMER WHOSE PROJECT IS AT ISSUE IN THE CURRENT APPLICATION, DOES THE COMPANY NEED ADDITIONAL LONG-TERM GENERATING CAPACITY TO SATISFY ITS PLANNING OBJECTIVES?

A. Yes. Even without the anticipated load from this Customer's Project, projected load (plus a planning reserve margin) exceeds the capacity of ELL's existing and LPSC-approved resources, which indicates a need for additional long-term capacity. My Exhibit LKB-4, which contains HSPM, reflects ELL's resources relative to forecasted load for 2025-2035, with the black line depicting ELL's load requirement *without* the Customer's new load and the red line depicting ELL's load requirement *with* the Customer's new load. HSPM Exhibit LKB-4 takes into account currently owned and contracted resources and those future resources that have been approved by the Commission, and the underlying data is drawn from ELL's preliminary Business Plan 25 ("BP25"), which has been expedited in order to evaluate the capacity and energy needed to support this Customer. Importantly, HSPM Exhibit LKB-4 does not account for or reflect the generation resources included in this Application for which ELL is seeking certification.

The resource surplus/deficit from year to year without the Customer's load is the difference between the black line and the bar for each year on the X Axis, which represents ELL's existing resources, approved resources, conditionally approved resources, and resources pending LPSC approval. Similarly, the surplus/deficit from year to year *with* the Customer's new load is represented by the difference between the red line and each bar on the X Axis. BP25 will continue to evolve until officially

approved by ELL, but the planning assumptions and solution to serve the Customer will not change.

In terms of resource availability, HSPM Exhibit LKB-4 also reflects slight modifications to unit-deactivation assumptions from BP24 that were discussed in ELL's most recent IRP, as well as existing PPAs that are expected to expire on their stated expiration dates. The unit-deactivation dates have been modified to balance ELL's ability to meet its energy and capacity needs with achieving customer affordability, the time needed to build new resources, and the ability to ramp to serve this Customer. As seen in HSPM Exhibit LKB-4, using ELL's Spring SAC, ELL will need [redacted]

Q36. WHAT ARE ELL'S CURRENT PLANS TO MEET THE LONG-TERM CAPACITY AND LOAD SERVING CAPABILITY NEEDS OF ITS CUSTOMERS?

A. As noted above, the Company has developed and continues to refine an integrated plan that considers generation, demand response, energy efficiency, and transmission and that plans to meet customer needs at the lowest-reasonable-cost. Just to mention a few examples:

- ELL is pursuing a ten-year Capacity Credit Purchase Agreement for 290 MW of capacity related benefits from the Magnolia Power Generating Station that will be located in Iberville Parish (pending in LPSC Docket No. U-37193);

- ELL is pursuing the construction of the 112 MW Bayou Power Station, a gas-fired reciprocating internal combustion engine resource with black-start capability in Leeville, Louisiana and an associated microgrid that would serve downstream of the Clovelly substation (pending in LPSC Docket No. U-37131); and
- ELL is pursuing the development of the West Bank 230kV Project, a significant new transmission project on the West Bank of the Mississippi River in ELL's Amite South Planning Region consisting of a new 500/230kV Substation (the Commodore Substation) and approximately 60 miles of new 230kV transmission line to connect the existing Waterford Substation to the Commodore Substation (pending in LPSC Docket No. U-37143).

The Company continues to need long-term capacity over the planning horizon, and ELL will meet this need from a diverse set of resources that will provide efficient operating flexibility to serve evolving customer demands.

Moreover, as I discussed above, resource planning is a dynamic process, and ELL's plans accordingly must be updated regularly—a fact that is especially important currently, when ELL is updating certain generator-retirement dates and fielding varying levels of responses to Requests for Proposals ("RFPs"). The Planned Generators proposed in the Application will operate as baseload and load-following generation resources—and will thus help maintain reliability when intermittent resources are not available—and will also provide key resources moving forward for ELL's resource-

planning efforts, especially in light of the dynamic characteristics discussed more fully above.

Q37. PLEASE EXPLAIN WHETHER AND HOW DEMAND RESPONSE RESOURCES FIT WITHIN ELL'S RESOURCE PLANNING.

A. ELL maintains that all available options to reliably serve load must be considered. As discussed previously, ELL has sought, and received, approval for various solar resources and continues to solicit solar and hybrid resources. In line with that approach, on September 13, 2024, ELL issued an RFP seeking proposals for a variety of demand-response programs.[24] Demand response is an important capacity-planning tool that can offset the need for new generation.

Q38. DOES THE RELIEF SOUGHT IN THIS DOCKET SUPPORT ELL'S THREE KEY PLANNING OBJECTIVES FOR RESOURCE PLANNING?

A. Yes. As set forth above, the three key planning objectives for resource planning are reliability, affordability, and environmental stewardship. The relief sought in the Application satisfies each of these planning objectives.

Q39. HOW DOES THE RELIEF SOUGHT IN THIS DOCKET SUPPORT ELL'S RELIABILITY PLANNING OBJECTIVE?

[24] *See* Entergy, *Notice of Release of 2024 ELL Demand Response Program RFP, Bidder Registration and Bidders Conference,* Entergy Corporation (September 13, 2024), *available at* https://spofossil.entergy.com/ENTRFP/SEND/2024ELLDemandResponsePrograms/Index.htm.

A. First, with respect to reliability, adding the Planned Generators will provide the necessary capacity required for the new load from the Customer. The Planned Generators are not devoted solely to the Customer, however, and are instead dispatchable resources that will be committed and dispatched in economic merit order by MISO. Moreover, the CCCTs will utilize a technology that provides an inertia-based source of energy that will help maintain electric system voltage at desired levels and thus enhance reliability.

In addition to the CCCTs, the Application contemplates various transmission upgrades, including the Mount Olive to Sarepta Transmission Facilities, which include a 500 kV line that will provide reliability and other benefits to many of ELL's customers, especially those located in North Louisiana. Moreover, as previously discussed, ELL intends to site its third CCCT within SELPA (including potentially Amite South), which will help mitigate any adverse effects from the change in power flows resulting from the addition of the large load associated with the Customer's Project, as noted above, and which will correspondingly enhance reliability throughout both the Central and SELPA regions. Lastly, although no specific solar and/or hybrid options are being presented for Commission approval in this proceeding, those resources are a central component of the CSR for which ELL will seek Commission approval, and the 1,500 MW of solar and/or hybrid resources contemplated by the CSR, if approved, will provide additional system resources that will be committed and dispatched in order by MISO and will encompass similar reliability benefits.

Q40. HOW DOES THE RELIEF SOUGHT IN THIS DOCKET SUPPORT ELL'S AFFORDABILITY PLANNING OBJECTIVE?

A. With respect to affordability, I have already mentioned that the resources made the subject of the Application—the Planned Generators as well as selected solar and/or hybrid resources for which ELL will ultimately seek streamlined certification, if the CSR is approved in this proceeding—will be committed and dispatched in economic merit order by MISO, meaning they will be dispatched when it is cost-effective to do so relative to alternative sources of capacity and energy that may be available to serve the relevant loads in the MISO markets. Moreover, it is critical to remember that the Customer is contributing significant amounts up front—both through its CIAC Agreement, through which it is paying for all of the costs to build the Customer-Paid Substations, the Interim Transmission Facilities, and the Point-of-Delivery Transmission Facilities and construction-financing costs for the Planned Generators—and also paying for the cost of the generators during the term of the ESA through its Minimum Charge under Rate Schedule LLHLFPS-L. Even more, because the Customer is participating in Rate Schedule LLHLFPS-L—which is a standard rate schedule offered to qualifying large industrial customers (and under which a number of such customers already take service)—the Customer is also paying its allocated share[25] of the Company's FRP Rate Adjustment, the Fuel Adjustment Clause ("FAC"), and other applicable riders including the Financed Storm Cost and Resilience Riders.

[25] 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.

The Customer's participation in a standard rate schedule, coupled with its significant up-front contributions and the procedures in MISO to ensure efficient utilization of the new resources, are expected to lead to significant benefits, including reduced rates, to all of ELL's customers.

Lastly, as I discuss in greater detail below, the Customer is matching Entergy Corporation's (through its shareholders) donations to the "Power to Care" program up to $1,000,000, with a stated purpose of assisting with energy affordability for older adult customers and customers with disabilities that live on low or fixed incomes in Louisiana. This generous commitment by the Customer is expected to have a profound impact on affordability for a segment of ELL's customer base that needs it the most.

Q41. HOW DOES THE RELIEF SOUGHT IN THIS DOCKET SUPPORT ELL'S ENVIRONMENTAL-STEWARDSHIP PLANNING OBJECTIVE?

A. As to environmental stewardship, and as Mr. Owens also discusses in his Direct Testimony, ELL and the Customer have proposed hydrogen- and CCS-enabled CCCTs for the new generators because those resources provide the level of around-the-clock, reliable service needed for the Customer (something renewable resources cannot do on their own) while also emitting less carbon than alternative, equally reliable thermal generators. Even more, ELL, with the goal of increasing the sustainability of its system in light of the need for the proposed CCCTs, worked to secure the Customer's agreement to the CSR, which is a commercial agreement and rate rider specific to this Customer that seeks to provide substantial renewable energy (in the form of 1,500 MW of solar and/or hybrid resources in excess of the 3 GW of solar and hybrid resources

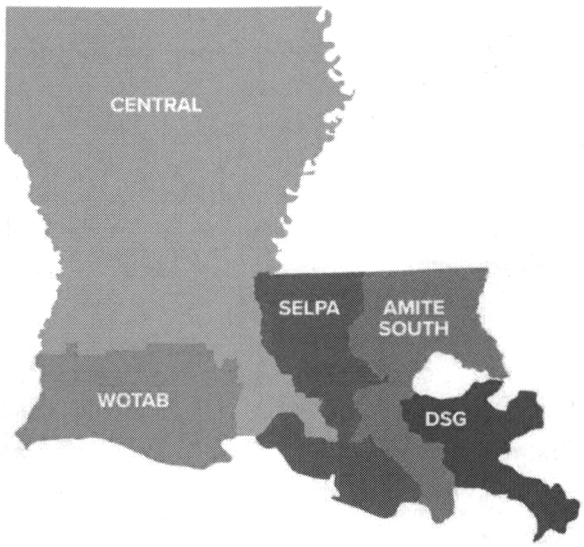
approved by the Commission through the 3 GW Order, as well as potentially wind and nuclear resources in the future, and a contribution subject to a price cap specified in the CSR for CCS at LCPS). Through these environmental commitments, which are covered in depth in Ms. Ingram's Direct Testimony, ELL is achieving both its resource-planning goal of environmental stewardship and providing a suite of offerings to the Customer that allows the Customer to move forward with its Project in Louisiana, while also supporting the Customer's own corporate sustainability commitments.

In sum, the Project, especially when combined with the CSR, provides reliability and affordability benefits to all customers that ELL serves, while also advancing ELL's environmental-stewardship goals and providing the Customer with access to near-zero or zero carbon emitting resources that were important in selecting Louisiana as the location of the Project. The Project certainly satisfies ELL's three resource-planning goals.

IV. NEED FOR DISPATCHABLE GENERATION

Q42. YOU PREVIOUSLY TESTIFIED THAT TWO OF THE PROPOSED CCCT GENERATORS WOULD BE LOCATED IN THE CENTRAL PLANNING REGION, AND THE THIRD WOULD BE IN SELPA. PLEASE SUMMARIZE ELL'S SERVICE IN THE CENTRAL PLANNING AREA AND THE MANNER IN WHICH SERVICE IS PROVIDED TO CUSTOMERS IN THAT AREA.

A. As seen in the map of ELL's planning areas, which is reproduced again below, the Central Planning Area is the largest of ELL's planning areas by land area and encompasses a significant portion of the State of Louisiana.



Historically, although the Central Planning Area is the largest portion of the State by land area, it has also had very little load when compared to the other planning areas, located further south, primarily because of the concentration of the State's industrial operations (and thus the majority of the State's electrical load) along the Mississippi River and the Interstate 10 corridor paralleling the Gulf Coast. Because of the low density of large load in the Central Planning Area, there correspondingly has been less need for generation and transmission in that area. ELL therefore plans to add two new CCCTs next to the Customer's site, in large part due to the fact that the Customer's new load reasonably has led ELL to revisit longstanding expectations with respect to generation and transmission needs in the Central Planning Area. Furthermore, and importantly, this Customer's load is so large, and its load factor is so high, that, even if the Project were proposed to be built in an area of ELL's electric

system with existing industrial load and strong transmission capability, ELL would still need to build all three CCCTs to cover the Customer's energy and capacity requirements.

Q43. PLEASE SUMMARIZE ELL'S SERVICE IN SELPA AND THE MANNER IN WHICH SERVICE IS PROVIDED TO CUSTOMERS IN THAT AREA.

A. SELPA is a region in ELL's service area that includes the Amite South subregion and the area DSG, itself a subregion of Amite South. Each of these areas is designated on the above map. SELPA, Amite South, and DSG each qualifies as a "load pocket," which is a region of high load concentration that is dependent on local generation capability within its borders to reliably serve load due to a limit on the ability to import power into the region. Because SELPA is a load pocket, the set of facilities and operational procedures necessary to maintain reliable service there are influenced largely by changes in the generation fleet, load levels and locations, and transmission topology in the region.

Q44. WHY ARE TWO OF THE CCCTS BEING BUILT ADJACENT TO THE CUSTOMER'S SITE?

A. Generally speaking, there are benefits to siting generators in close proximity to significant loads, and that is certainly the case here, where a substantial amount of new load is being added to an area that has historically not experienced such demand, as described above. In addition, two of the CCCTs are being built next to the Customer's site in order to meet certain bulk electric system compliance and operational flexibility

requirements and based on analysis showing that this siting choice helps mitigate the overall set of new resources and the associated cost needed to serve the Customer. Mr. Kline discusses these issues and this analysis in greater detail in his Direct Testimony.

Q45. WHY IS THE THIRD CCCT BEING BUILT IN SELPA?

A. As mentioned above, SELPA is a load pocket, meaning it relies on imports to serve all the load in the area and its ability to import sufficient electricity is constrained by a variety of factors. In the past, electricity has tended to flow from the northern part of the State into SELPA; with the addition of the Customer's new load, however, those generally prevailing power flow patterns are expected to change, and less power will tend to flow north to south from the Central Planning Area into SELPA. The third generator is being located in SELPA both to garner the benefits from siting a generator in a load pocket, close to the areas in which ELL has significant load, and also to mitigate any adverse impacts of having less power flowing from the Central Planning Area into SELPA. Mr. Kline also discusses this topic in greater detail in his Direct Testimony.

Q46. YOU TESTIFIED THE LOCATION FOR THE THIRD CCCT IS NOT YET CERTAIN. PLEASE EXPLAIN THE CURRENT STATUS OF FINDING A LOCATION FOR THE THIRD CCCT.

A. [redacted]

[redacted] and ELL intends to supplement this filing over the coming months.

Q47. WHAT ALTERNATIVES WERE CONSIDERED OTHER THAN CONSTRUCTING THREE NEW CCCT GENERATORS AND THE OTHER COMPONENTS REQUESTED TO SERVE THE PROJECT?

A. Mr. Bulpitt addresses in his Direct Testimony the different generation technologies that were considered to serve the load associated with the Customer's Project. My team and I took the information supplied by him and his team and used it in our resource planning activities to evaluate combinations of specific resources and resource locations to serve the Customer's Project. As part of that step, we considered, and in some cases as appropriate progressed to more detailed analysis of, several different alternatives to the solution proposed in the Application, specifically (1) constructing all new CCCTs with minimal transmission facilities and no renewables; (2) serving the Customer's load with renewables only; (3) building a 2x1 CCCT in lieu of two 1x1 CCCTs at Franklin Farms (the site in Richland Parish of the Customer's Project); (4) serving the Customer through transmission alone; and (5) deciding not to serve the Customer's load. Each of these options was determined to be infeasible or inferior for one reason or another.

Q48. WHY WERE EACH OF THESE ALTERNATIVES FOUND TO BE INFEASIBLE OR INFERIOR?

A. First and foremost, the solution proposed for the Project, with its mix of generation and transmission facilities combined with the resources contemplated by the CSR, proved to be the most cost-effective and reliable option for serving this Customer while ensuring ELL was able to meet both the Customer's timeline and the Company's and the Customer's environmental-stewardship objectives. The facilities proposed in the Application comprise the best solution ELL identified for providing service to the Customer, and the other alternatives were reasonably rejected for that reason alone. Each of the potential alternatives also had other reasons for which they were infeasible or inferior. As to the first alternative, which contemplated no renewable resources at all, that option did not align with either ELL's or the Customer's environmental-stewardship objectives. It was important for the Customer in selecting ELL and the State of Louisiana as the site of its Project that the CSR provided options for zero to near-zero carbon emission resources.

As to the second alternative—*i.e.*, a renewables-only option—multiple factors led us to conclude early in our process that this option was fundamentally infeasible and inferior. Preliminarily, it is important to note that the concept of a "renewables-only" option is a misnomer because renewable resources (solar, wind, and related storage options), due to their operating profile, cannot reliably support the Customer's operations—which, as is expected from the nature of the Project, have a very high load factor—twenty-four hours a day, every day of the year. For this "renewables-only" option to be practical in light of the Customer's needs, ELL would have to construct a gas-fired generator, such as a simple-cycle combustion turbine, to provide generation when the sun is not shining, the wind is not blowing, and the batteries have discharged

their stored energy. Moreover, the cost of such a renewable-heavy portfolio is prohibitive; based on the level of capacity accreditation associated with these types of resources, ELL would have to build out two-to-three times the Customer's projected peak load to account for the resources' load-serving capability, meaning ELL would have to construct up to approximately [redacted] The investment for this amount of solar resources, *without* taking into account the investment needed for transmission upgrades, was expected to amount to [redacted] on its own. Given the tremendous financial resources required as well as the amount of land needed for this generation—and the fact that, even after all these resources are constructed, ELL would still have to construct gas generation to provide energy during times at which the renewables were unable to provide reliable service—this option was deemed to be financially and operationally infeasible and far inferior to the chosen solution.

As to the decision to construct two 1x1 CCCT generators at Franklin Farms rather than one 2x1 CCCT, Mr. Kline explains that decision in greater detail in his Direct Testimony, but the primary reason was that a larger generator resulted in reliability issues under certain contingencies that must be evaluated and planned for under the applicable NERC regulations, and those issues would have driven a need for more (and significantly costlier) transmission upgrades.

As to the fourth and fifth options—serving the Customer only through transmission or deciding against serving the Customer at all—both were clearly infeasible and inferior. The size of this Customer's load requires new generation resources; there are not sufficient existing resources available to service a new [redacted]

MW load, and thus a transmission-only solution was infeasible. As to the option of declining to serve the Customer, it is my understanding that ELL generally has an obligation to serve customers who need electric service in Louisiana and can pay for that service. For ELL to simply turn away a major economic development project such as the Customer's Project would send a message to companies considering Louisiana as a site for their major projects that the state is hostile to new business and may refuse to offer the electric service on which a prospective customer's project may depend. Sending such a message would do major harm to the economy of the state, imperil the state's future economic growth, and harm the future livelihoods of the people of Louisiana. These considerations, coupled with the significant economic benefits promised by the Customer's Project for Northeast Louisiana as well as the significant up-front and continuing financial contributions being made by the Customer, rendered this option infeasible and inferior.

Q49. NOTWITHSTANDING THE PROPOSAL TO BUILD THREE NEW CCCT GENERATORS AND TO PROCURE 1,500 MW OF SOLAR AND/OR HYBRID RESOURCES THROUGH THE CSR, IS ELL CONTINUING ITS EFFORTS TO FIND ADDITIONAL SOURCES OF EXISTING CAPACITY?

A. Yes. As mentioned above, the Customer's total anticipated load is [redacted] MW, and the new CCCT generators will provide 2,262 MW of new baseload generation, resulting in a difference of [redacted] MW of needed capacity. To cover that deficit, [redacted]

[redacted] ELL has plans in place to meet the Customer's projected demand, but the existing resources are insufficient to serve the Customer's projected load, and the difficulty in finding existing capacity to serve this load given the dwindling supply of existing capacity further underscores the need for the Planned Generators.

Q50. WOULD IT BE ECONOMICAL FOR ELL TO ADDRESS ITS CAPACITY NEED FOR THE PROJECT THROUGH THE PURCHASE OF CAPACITY CREDITS IN THE MISO SEASONAL PRA RATHER THAN BY BUILDING THE NEW CCCT GENERATORS?

A. No. As a preface to this response, it bears emphasizing that market conditions in LRZ 9 are tightening, and there is a significant need for resource planning that reasonably accounts for long-term resource adequacy issues. The Commission has acknowledged this need: in its General Order issued on July 16, 2024, in Docket No. R-36263, the Commission imposed a minimum capacity obligation while affirmatively stating the "purpose of the rule is for every utility to prudently plan to supply 100%" of its Applicable Planning Reserve Margin Requirement and noting "there are clear concerns regarding the future of resource adequacy" in Louisiana.[26] ELL shares the Commission's desire to ensure adequate resources exist to serve customers into the future, accounting for resource development lead times, load forecast uncertainty, and other factors.

[26] *See* General Order (July 16, 2024), *In re: Consideration of Whether the Commission Should Adopt Minimum Physical Capacity Threshold Requirements for Load Serving Entities*, Docket No. R-36263, p. 4-5.

To that end, while the MISO PRA provides an avenue to correct short-term imbalances, over-reliance on the short-term market in lieu of a long-term resource-planning strategy is an imprudent and risky practice—especially at a time when market conditions are tightening. The MISO PRA is a one-year-ahead mechanism that is not designed to ensure that an adequate amount (or appropriate types) of resources will be available in the long term. As a result, relying on the MISO PRA involves significantly greater risk to ELL customers as compared to a long-term resource such as the Planned Generators.

Unlike a long-term resource, purchasing capacity credits in the MISO PRA does not provide any additional capacity and provides no energy benefits or local area benefits. Rather, purchasing capacity credits satisfies only the financial requirement of the MISO PRA construct. Long-term resource planning is essential to ensure reliable electric service at the lowest reasonable cost. Physical generation, like the Planned Generators, is necessary to generate electricity that can be transported to customers for consumption. Therefore, even if ELL could be assured that sufficient capacity was available to meet ELL's current needs through the MISO PRA (which it cannot), this would still not address the local voltage issues or the anticipated load growth in the region. Consequently, reliance upon the MISO PRA to meet the needs of the region would place the reliability of service to all customers of ELL, cooperatives, and municipal systems in the region at risk, while also exposing all ELL customers to financial risk associated with tightening conditions in the MISO PRA, particularly in the MISO LRZ in which ELL is located (LRZ 9).).

Further, these risks have been compounded recently because, as discussed in greater detail above in the response to Q.34, significant tightening has been noted in LRZ 9 since MISO implemented the seasonal PRA. MISO's data show that the capacity surplus LRZ 9 previously enjoyed has significantly decreased.[27]

Finally, while the precise timing of market equilibrium is unknown, there is an expectation that market conditions in the MISO market will continue their trend of tightening in the coming years, which is expected to lead to higher capacity prices. Moreover, unlike reliance on the capacity auction, the construction of the Planned Generators will provide customers with highly flexible resources that produce energy revenues to offset the cost of purchasing energy in the MISO day-ahead energy market and thereby protect customers from increasing energy prices in the market. In contrast, capacity credits provide no energy revenues to offset the cost to ELL customers of purchasing energy in the MISO market.

Q51. WHAT CAPACITY BENEFITS WOULD BE RECOGNIZED AS A RESULT OF ADDING THE PLANNED GENERATORS?

A. The Planned Generators, if approved, will be offered to MISO as system resources, meaning ELL will make the capacity from the CCCTs available in MISO's capacity markets. This has the dual benefit of (1) ensuring that the energy and ancillary services supplied by the CCCTs are available to serve loads across MISO each day of the year

[27] Staff has previously acknowledged, and expressed corresponding concerns regarding, the decrease noted by MISO in the capacity surplus in LRZ 9. *See* Staff's Final Report and Recommendation of Final Rule (May 6, 2024), *In re: Consideration of Whether the Commission Should Adopt Minimum Physical Capacity Threshold Requirements for Load Serving Entities*, Docket No. R-36263, pp. 34-47.

(unless a unit is unavailable) and, in turn, that the CCCTs are dispatched only when they are the most cost-effective options at the time they are dispatched, and (2) rendering ELL eligible to receive capacity credits for the CCCTs, which will inure to the benefit of all of ELL's customers. During the term of the Customer's ESA, these benefits will come at little to no cost to ELL's other customers.

Q52. PLEASE EXPLAIN THE DIFFERENT SUPPLY ROLES FOR WHICH ELL NEEDS CAPACITY.

A. In conducting long-term resource planning, ELL analyzes its overall capacity needs as well as its need for capacity that serves specific supply roles, such as base load, core and seasonal load-following, and peaking and reserve. Having the right amount of capacity suitable to serve each of these supply roles enables the Company to most efficiently, cost-effectively, and reliably serve the time-varying level of customer loads it experiences.

The Company defines its base load as the minimum level of load that is served 85 percent of the hours in a year. Core load-following requirements are those hours that exceed base load but are less than the load levels experienced in the highest 30 percent of hours of the year. The seasonal load-following requirement is defined as the levels of load that exceed base load and core load-following but are less than load levels experienced in the highest 15 percent of the hours of the year. The Company's peaking requirement is defined as the level of load that is served in the highest 15 percent of the hours of the year.

Each supply resource has its own unique cost and performance characteristics that make it functionally and economically suited to serve certain supply roles. Base-load resources typically cost more to construct per MW of available capacity, but operate with relatively low variable cost, and, because the resource is expected to operate in most hours at high utilization levels, the total supply cost is relatively low on a $/MWh basis. Conversely, a peaking or reserve unit is expected to operate at low utilization levels and higher variable costs but typically has a relatively lower capital cost per MW of available capacity and, therefore, is the most economical alternative when utilized in a peaking or reserve role. Load-following units have moderate capital cost and variable cost.

Peaking and reserve resources can be called upon to respond to contingency situations, such as transmission-line loss or generation failure in other parts of the system. When that occurs, a peaking and reserve resource is called upon to fill in for an otherwise more economic resource until that resource can be returned to service or other arrangements can be made.

Q53. HOW DO THE PLANNED GENERATORS HELP WITH THOSE SUPPLY ROLES?

A. The Planned Generators are intended to operate as baseload units. That said, the new CCCTs will be a highly flexible resource capable of quickly providing incremental energy with the ability to cycle back down quickly if required. Such highly flexible resources serve an important role in supporting the integration of intermittent resources

into the grid.[28] The new CCCTs complement ELL's recently approved portfolio of six photovoltaic resources with a total nameplate capacity of 699 MW in Docket Nos. U-36190 and U-36685, the 100 MW PPA from the Mondu Solar facility that was recently approved in Docket No. U-37071, and the 3 GW of renewable resources to be procured and certified by ELL through the process approved by the Commission in Order No. U-36697. The CCCTs will also aid in the integration of the 1,500 MW of new solar resources contemplated by the CSR.

Q54. WHAT ENERGY BENEFITS WOULD THE PLANNED GENERATORS PROVIDE?

A. In the MISO markets, portfolio balance means, among other things, having resources capable of supplying energy into the day-ahead and real-time markets at roughly the same volumes and same times as is expected to be purchased from those markets to serve customers. A generator in MISO, then, provides energy benefits when MISO determines that the variable cost of running the unit is lower than other available units on the system. The Planned Generators would be quick-start and fast-ramping resources. In addition, the Planned Generators would be available and quickly dispatchable by MISO to help ensure system reliability that increasingly will be impacted by the variability in intermittent renewable resources. Finally, as highly efficient resources, the Planned Generators will provide cost-effective energy to all

[28] According to the U.S. Energy Information Administration ("EIA"), one of the main advantages of Reciprocating engines is their ability to provide incremental electricity quickly, which the EIA states "ha[s] become increasingly important in areas with high shares of renewable electric generation from wind and solar." *See* EIS, *Natural Gas-Fired Reciprocating Engines are Being Deployed more to Balance Renewables*, U.S. Energy Information Administration (February 19, 2019), *available at* https://www.eia.gov/todayinenergy/detail.php?id=37972.

customers. Therefore, the Planned Generators will provide energy benefits when they are the lowest variable cost available resources on the system. Finally, as discussed by Mr. Kline, the Planned Generators also will provide important dynamic reactive power capability to the system.

Q55. HOW DOES CONSTRUCTION OF THE PLANNED GENERATORS AFFECT THE IRP AND ELL'S RESOURCE-PLANNING NEEDS IN THE FUTURE?

A. As I explain elsewhere in this Direct Testimony, the Planned Generators are intended to serve as system resources, thus leading to reliability and capacity benefits for all of ELL's customers. To that end, ELL's network and native load requirements are increasing, and ELL's system resources correspondingly need to increase to continue providing safe, reliable service.

As always, though, it is important to remember that ELL's resource planning is a dynamic and often-changing exercise, and the 2023 IRP (like all IRPs) offers a snapshot of ELL's resource-planning expectations as of the date the IRP is issued. ELL constantly monitors its load and resource plan and adjusts both according to actual conditions.

Moreover, as I also discuss elsewhere in this Direct Testimony, the capacity from the new CCCTs is being constructed in anticipation of this Customer's specific load, but, based on the anticipated deactivation of several of ELL's current generators and the aging of other, newer generators during the Original Term of the ESA, there is a potential that the Planned Generators could be used to assist with replacing legacy

generators and serving new economic load, especially if the Customer decides not to renew the ESA after the Original Term.

Q56. WILL ALL OF ELL'S CUSTOMERS RECEIVE BENEFITS FROM THE CAPACITY MARGINS ATTRIBUTABLE TO THE PLANNED GENERATORS AND ANY RESIDUAL ENERGY MARGINS ATTRIBUTABLE TO THOSE CCCTS?

A. Yes. These resources will be submitted to MISO as potential Network Resource Interconnection Service ("NRIS") resources, which would mean the Planned Generators could potentially be eligible for capacity credits, if NRIS is granted. As I explained above, if the resources receive capacity credits, those credits will inure to the benefit of all of ELL's customers. Moreover, the resources will be efficient, dispatchable generation that can operate as either baseload or load-following resources and that will provide high reliability and operational flexibility. Each of these characteristics entails benefits for all of ELL's customers, and the cost of achieving these benefits will be borne by the Customer during the term of the ESA.

V. ELL'S NEED FOR GENERATION IN THE FUTURE

Q57. AS YOU TESTIFIED EARLIER, THE ESA HAS AN ORIGINAL TERM OF FIFTEEN YEARS. HAS ELL EVALUATED WHETHER THERE WILL BE A NEED FOR THE PLANNED GENERATORS IF THE CUSTOMER DOES NOT RENEW ITS AGREEMENT AFTER THE FIRST FIFTEEN-YEAR TERM EXPIRES?

A. Yes, and ELL anticipates there will be a need for the Planned Generators, regardless of whether the Customer renews the ESA beyond the Original Term. ELL reached this

conclusion by evaluating forecasted load growth across the State (independent of the load added by this Customer) and the expected age of ELL's generation resources in 2041, after the fifteen-year original term expires. As of that year, ELL estimates that it will experience significant load growth and will also have several generators, including those at Perryville, Ouachita, and others, that will have operated for nearly forty years and will be nearing the ends of their economically useful lives. The Company's long-term resource plan includes several assumed new generation resources in this timeframe that are needed to serve the expected load growth and address the potential deactivations of aging resources. The Planned Generators could be utilized, if the Customer does not renew the ESA, to avoid the need for adding this additional generation. Company witness Samrat Datta provides an economic analysis of this potential outcome in his Direct Testimony.

Q58. WHY IS IT REASONABLE TO EXPECT THAT THE PLANNED GENERATORS WOULD BENEFIT CUSTOMERS IN THE UNLIKELY EVENT THAT THE ESA FOR THE CUSTOMER IS NOT RENEWED AT THE END OF THE FIFTEEN-YEAR ORIGINAL TERM?

A. In ELL's 2023 IRP, ELL explained that a recent analysis concluded ELL's CT and CCCT generators are generally assumed to have useful lives of longer than thirty years and further reflected that those CT and CCCT generators will be nearing the end of their useful lives near the end of the Original Term of the ESA, ELL could potentially use the Planned Generators to serve as replacements if the ESA is not renewed.

Moreover, that same IRP noted that a number of ELL's legacy gas generators are nearing their deactivation dates. Those legacy gas generators include Waterford 2 (which has a deactivation assumption date of [redacted]),[29] Little Gypsy Units 2 and 3 (which have deactivation assumption dates of [redacted]), and Ninemile 4 (which has a deactivation assumption date of 2031). ELL currently is conducting an RFP to seek out options for replacing the units that are expected to deactivate in the near term and is also considering whether these assumptions should extend a few years to allow for adequate replacement generation to be solicited.

Meanwhile, ELL has also acquired relatively newer generators, including (for example) the Perryville, Ouachita, and Union facilities, all of which are located in the Central Planning Area. When the Original Term of the ESA expires, they will be significantly farther along in their respective useful lives. As mentioned, ELL has issued RFPs to find assets in the near term that could replace the legacy Amite South units that are deactivating over the next decade, and the resources for which certification is sought in this proceeding are not being designated to replace those units. That said, with the expected deactivation of these legacy assets (and eventually, the newer assets and the existing CT and CCCT generators as well), the three CCCTs for which ELL is seeking certification could be called upon, if the Customer decides not to renew, to replace those deactivated resources or meet new load from economic development.

[29] [redacted]

VI. MISO

Q59. WHAT IS MISO'S ROLE WITH RESPECT TO THE PLANNED GENERATORS AND TRANSMISSION UPGRADES?

A. MISO is the Regional Transmission Organization in which ELL is a transmission-owning member. MISO thus performs a variety of functions related to the ELL transmission system, including evaluating generator interconnection requests for new resources that wish to interconnect to ELL's transmission facilities. Further, as I mentioned above, ELL intends to use the Planned Generators (as well as certified solar and/or hybrid resources) as capacity resources in MISO and thus to offer them into the PRA. In order to obtain capacity credit for the three CCCT (and approved solar and/or hybrid) resources, ELL will apply for NRIS for those resources, and MISO, in accordance with the processes outlined in the MISO Tariff, will study the impacts of the new generators on the transmission system and, through a course of definitive planning phases, determine the transmission system upgrades, if any, that are required in order for the generators to interconnect with MISO's system and supply capacity to loads across MISO. Once the generators and any required transmission upgrades are complete and placed in service, ELL should be able to offer the energy and capacity from the new generators into the MISO markets, thus entitling ELL to the receipt of energy revenues and capacity credits/revenues for the CCCT resources that will inure to the benefit of all of ELL's customers. Mr. Kline discusses these issues in more detail in his Direct Testimony, along with other alternatives ELL is considering to obtaining these rights should those alternatives be determined to be more advantageous to ELL customers than obtaining NRIS.

VII. COSTS OF CUSTOMER RESOURCES

Q60. WHAT PROJECTED COSTS FOR CONSTRUCTION OF THE PLANNED GENERATORS WERE INCLUDED IN THE AGREEMENTS WITH THE CUSTOMER?

A. The total capital investment for the Planned Generators was estimated in the CIAC Agreement to be approximately $3,237,951,772. ELL also estimated in the CIAC Agreement that there would be $[redacted]. Mr. Bulpitt discusses the current cost estimates for the Planned Generators in his Direct Testimony.

Q61. WHAT IS THE PROJECTED COST FOR THE CUSTOMER-PAID SUBSTATIONS AND TRANSMISSION UPGRADES?

A. ELL's current estimate for these facilities is $[redacted].

Q62. HOW IS THE CUSTOMER CONTRIBUTING TO THESE COSTS?

A. As I testified earlier, the Customer is contributing substantial amounts to the construction of these facilities through the CIAC Agreement and supportive cash flow through its minimum monthly payments under the ESA. The amounts paid by the Customer through the CIAC [redacted]

[redacted]

As to the expense to own and operate the Planned Generators, that expense for the term of the ESA will be recovered through the Customer's minimum monthly payments. Mr. Jones discusses those calculations in greater detail in his Direct Testimony.

Q63. HOW WILL ELL RECOVER THE REMAINING COSTS OF THE PLANNED GENERATORS, THE STERLINGTON 500 KV SUBSTATION EQUIPMENT, AND THE MOUNT OLIVE TO SAREPTA TRANSMISSION FACILITIES?

A. Mr. Jones discusses these issues more fully in his Direct Testimony, but generally, the Customer will pay for the vast majority of the cost of the new CCCTs through its Minimum Charge if the Customer renews the ESA for an additional fifteen years. In other words, if the Customer continues to take service from ELL under Rate Schedule LLHLFPS-L and the ESA through 2056, the Customer will have paid a substantial portion of the entire cost of the new CCCT generators.

If the Customer does not renew the ESA as described, the remaining costs of the Planned Generators as of the expiration date of the Original Term of the ESA would be paid by all other customers over the balance of these resources' useful lives. As I testified earlier, however, under such a scenario, ELL anticipates the Planned

Generators could be used to replace aging generators that will (at that time) soon be deactivated as well as to meet any new load.

With respect to the Sterlington 500 kV Substation Equipment, that transmission project is a System Improvement that entails benefits generally to all of ELL's customers, especially in north Louisiana. The costs of those upgrades will accordingly be borne by all ELL customers and other users of the ELL transmission system, consistent with ELL's Terms and Conditions of service and line extension policies.

VIII. FUEL SUPPLY AND CLEAN ENERGY

Q64. TURNING TO THE SUPPLY PLAN FOR THE PLANNED GENERATORS, WHAT FUEL DOES ELL CURRENTLY PLAN TO USE TO POWER THE THREE NEW CCCTS?

A. The Planned Generators will be powered by natural gas for the foreseeable future.

Q65. WHAT ARE ELL'S PLANS TO PROCURE NATURAL GAS FOR THE PLANNED GENERATORS?

A. ELL has an ample supply of natural gas and a diverse group of potential suppliers. Thus, although ELL has not negotiated a specific contract to supply the gas needed for these three CCCTs, ELL has a market from which it can readily obtain the supply it needs to power these generators and that provides a reliable indication of the expected price.

Q66. ARE THERE ANY ANTICIPATED COSTS WITH RESPECT TO THE PIPELINES DELIVERING NATURAL GAS TO THE PLANNED GENERATORS, AND HOW WILL THOSE COSTS BE RECOVERED?

A. Yes, however those costs have not been finalized, and ELL's discussions with the multiple natural gas pipelines in the area are ongoing. Ultimately, the cost to access the available pipelines will be recoverable through the FAC. As discussed earlier in my Direct Testimony, because of the nature of the Customer's service under a standard rate for electric service and the applicability of the FAC, it is estimated that the Customer will bear approximately [redacted] of all costs recovered through the FAC, including costs to deliver natural gas to all of the Company's generators.

Q67. YOU TESTIFIED EARLIER ABOUT BOTH ELL AND THE CUSTOMER'S ENVIRONMENTAL STEWARDSHIP OBJECTIVES AND THE CSR. HOW DOES THE CSR FIT INTO THIS FUEL SUPPLY PLAN?

A. The CSR, which is attached as Appendix E to Rider 1 to the ESA, is an agreement specific (and open only) to this Customer that seeks to fulfill the environmental-stewardship goals of ELL (and support the sustainability commitments of the Customer) by arranging for the offset of a significant portion of the carbon emissions from the Planned Generators. Ms. Ingram describes the CSR more fully in her Direct Testimony, but generally, the CSR is divided into three overarching categories: procurement of 1,500 MW of solar and/or hybrid resources, installing CCS technology at LCPS, and the potential addition of other clean resources.

Q68. WAS A SUSTAINABILITY COMPONENT REQUIRED FOR THE CUSTOMER TO BE WILLING TO DO BUSINESS IN LOUISIANA?

A. It was important for the Customer in selecting ELL and the State of Louisiana as the site of its Project that the CSR provided options for zero to near-zero carbon emission resources.

Q69. LET'S BRIEFLY DISCUSS EACH OF THE COMPONENTS OF THE CSR. FIRST, PLEASE DESCRIBE THE PLAN FOR PROCURING 1,500 MW OF SOLAR AND/OR HYBRID RESOURCES.

A. In her Direct Testimony, Ms. Ingram describes in detail the process proposed by ELL for procuring the 1,500 MW of solar and/or hybrid resources contemplated by the CSR, but from a high-level perspective, the Customer has committed to a customer-specific arrangement that includes pricing consistent with Option B of ELL's Geaux Zero green tariff, and ELL is asking in this proceeding to be able to use the alternative, streamlined certification process contemplated by the 3 GW Order for approval of the designated resources. The expectation is that ELL will recover the costs of the procured resources over the course of their useful lives or the term of the underlying PPA, as applicable, and that, once in full service, 21% of the carbon emissions from the new CCCTs will be offset by the Customer's solar and/or hybrid commitments.

Q70. WILL THE 1,500 MW CONTEMPLATED BY THE CSR REDUCE THE PORTION OF THE 3 GW PREVIOUSLY APPROVED IN DOCKET NO. U-36697 FOR ELL'S

GREEN TARIFFS THAT IS AVAILABLE TO OTHER SUBSCRIBING CUSTOMERS?

A. No. The 1,500 MW would be procured using the expedited process the Commission recently approved for the 3 GW portfolio, but it would not reduce the portion of the 3 GW available to other subscribers. I understand that the terms of the Commission's order in Docket No. U-36697 allow ELL to procure additional MW of new solar and/or hybrid resources (above the 3GW) if it has a long-term binding commitment from a subscribing customer, and ELL is asking the Commission to approve the CSR, which contemplates up to 1,500 additional MW of solar and/or hybrid resources, in this proceeding.

Q71. HAS ELL RECEIVED ANY INFORMATION FROM POTENTIAL BIDDERS WITH RESPECT TO SOLAR RESOURCES THAT MIGHT PROVIDE INSIGHT INTO WHETHER RESOURCES EXIST TO MEET THESE DEMANDS?

A. [redacted]

Q72. IS ELL ASKING FOR CERTIFICATION OF ANY SOLAR AND/OR HYBRID RESOURCES IN THIS APPLICATION?

A. No, with the limited exception that there is one potential renewable resource that, if commercial negotiations are successful in a manner timely to consideration in this

Application, ELL may supplement this application to add a request for certification of that specific resource. In general, however, ELL is seeking approval of the CSR and a finding that it is entitled to use the alternative, streamlined certification procedure set forth in the 3 GW Order for the 1,500 MW of new solar and/or hybrid resources contemplated by the CSR.

Q73. PLEASE EXPLAIN GENERALLY THE CCS PROJECT AT LCPS THAT IS UNDER CONSIDERATION AND HOW THE CUSTOMER IS EXPECTED TO RECEIVE CREDIT FOR CCS.

A. Mr. Bulpitt describes CCS in greater detail in his Direct Testimony, but CCS technology involves capturing carbon dioxide from an industrial process and/or generation facility before transporting and injecting the carbon dioxide into subterranean geological features for storage. Here, the Customer has agreed to pay a capped amount (as referenced in the CSR) for CCS expenses in exchange for the credits from the environmental attributes of CCS at LCPS.

Q74. IS ELL ASKING THE COMMISSION TO CERTIFY CCS IN THIS FILING?

A. No. ELL is presently working to develop a more detailed plan and cost estimate for CCS and, assuming that work leads ELL to conclude that proceeding with CCS at LCPS is in the public interest, ELL will submit a future filing to the Commission that seeks approval of CCS at LCPS and any other unit where ELL proposes to add that technology. Nothing the Company is asking the Commission to do or find in this proceeding would prejudge that issue or limit the Commission's ability to determine

the merits of an ELL CCS project that may be presented for Commission approval in the future.

Q75. PLEASE DESCRIBE GENERALLY THE OTHER CLEAN RESOURCES CONTEMPLATED BY THE CSR.

A. The CSR also contemplates the possible addition of certain wind and nuclear resources. With respect to the former, ELL has agreed to continue pursuing the development of a wind energy resource that has the potential to be delivered to MISO South.

As to nuclear resources, ELL has agreed to provide, at the Customer's request, reasonable information regarding whether Customer's procurement from the Company, or its affiliates, of zero-emission attributes or similar rights in any nuclear generation facilities, would (i) help enable the relicensing and continued operations of such facilities, and (ii) is commercially feasible. If such a procurement is commercially feasible, ELL and the Customer have agreed to negotiate in good faith to attempt to reach mutually agreeable terms.

Should ELL come to successful commercial terms for these resources, it will make a future application to the LPSC before acquiring them.

Q76. WHAT IS THE ANTICIPATED ENVIRONMENTAL IMPACT OF THE RENEWABLE OPTIONS IN THE CSR ON THE EMISSIONS FROM THE PLANNED GENERATORS?

A. Once fully operational, ELL anticipates the 1,500 MW of solar and/or hybrid resources and the CCS operations at LCPS, if ultimately pursued and implemented, will offset approximately 60% of the carbon emissions from the new CCCTs.

Q77. ARE THERE ANY OTHER NOTABLE COMMITMENTS IN THE CSR?

A. Yes. In addition to the substantial environmental commitments discussed above and in greater detail in Ms. Ingram's Direct Testimony, the Customer has committed to match ELL's contribution to Entergy's "The Power to Care Program" by donating up to $1,000,000 per year for the term of the ESA. Both ELL and the Customer intend that the donation from the Customer be used to provide financial assistance to older adult customers and customers with disabilities that live on low or fixed incomes in Louisiana.

Q78. DO THE RESOURCES IN THE CSR ADVANCE THE STRATEGIES OUTLINED IN THE 2023 IRP?

A. Yes. As described in the action plan of the 2023 IRP, ELL plans to seek sizeable and frequent tranches of renewable resources in an attempt to respond to customer preferences, to increase the diversity of ELL's generation portfolio, to continue to provide reliable electric service to its customers at the lowest reasonable cost, to capitalize on the improving economics of solar and potentially other technologies relative to conventional generation resources, and to work towards its 2030 and 2050 sustainability goals. This proposed strategy—including the 1,500 MW of new solar and/or hybrid resources that will be offered by ELL into the MISO markets to supply

customers (and the revenue requirement for which will be offset by the subscription fees paid by the Customer)—will add capacity and energy to the grid to meet ELL's projected capacity and energy needs, part of which are driven by new customers and customers who are expanding their operations, thus ensuring ELL can support new economic development in the region.

IX. REPORTING

Q79. IS ELL WILLING TO FILE MONITORING REPORTS REFLECTING PROGRESS ON CONSTRUCTION OF ITS GENERATION AND TRANSMISSION PROJECTS?

A. Yes, and the proposed form of monitoring plan is attached hereto as Exhibit LKB-5.

X. CONCLUSION

Q80. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The plans by this Customer for a new [redacted] in Richland Parish promise huge economic benefits to that area and to the Northeast Louisiana region as a whole. Recognizing the transformative benefits this project has to offer, ELL has worked closely with the Customer to reach an agreement that largely insulates ELL's other customers from paying for the upgrades required for the Customer's Project while also arranging for the Customer to participate in a Commission-approved rate schedule, pay an allocated share of (and thus defray the costs borne by other customers of) all other effective riders, and, through the CSR, make substantial environmental commitments that will offset a huge portion of the carbon emissions from the new generators needed for the Customer's anticipated load. ELL has further structured the deal such that all

customers will benefit from additional reliability and capacity and energy credits promised by the resources—credits that will operate to lower all customers' retail rates across the State. This proposal is a tremendous win-win-win: ELL fulfills its obligation to serve a significant new load; the Customer is able to site its large-scale operations in a historically underdeveloped portion of the State; and all citizens of the State reap the rewards from a massive and never-before-seen economic-development opportunity.

Q81. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, for now.

AFFIDAVIT

STATE OF LOUISIANA

PARISH OF ORLEANS

NOW BEFORE ME, the undersigned authority, personally came and appeared, **Laura K. 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 K. Beauchamp

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 22nd DAY OF October 2024

NOTARY PUBLIC

My commission expires: At Death

MICHAEL DODSON
NOTARY PUBLIC
STATE OF LOUISIANA
COMMISSIONED FOR LIFE
NOTARY ID NO. 151127
ORLEANS PARISH, LA

Listing of Previous Testimony Filed by Laura K. Beauchamp

DATE	TYPE	SUBJECT MATTER	REGULATORY BODY	DOCKET NO.
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	CCNO	UD-18-07
06/06/2022	Adopting	ELL Solar Portfolio and Green Tariff	LPSC	U-36190
02/28/2023	Direct	ELL Solar CCN Application	LPSC	U-36685
03/13/2023	Direct	ELL 3,000 MW Solar Application	LPSC	U-36697
08/30/2023	Direct	ELL Regulatory Blueprint	LPSC	U-36959
12/18/2023	Direct	ELL 2023 Solar Application	LPSC	U-37071
01/31/2024	Affadivit	ELL Notice of Exemption – Audubon Substation	LPSC	S-37113
3/05/2024	Direct	ELL Bayou Power Station	LPSC	U-37131
5/01/2024	Direct	SERI Power Uprate	FERC	EL21-56-002

BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

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 LKB-2

HIGHLY SENSITIVE
PROTECTED MATERIAL

INTENTIONALLY OMITTED

OCTOBER 2024

BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

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 LKB-3

HIGHLY SENSITIVE
PROTECTED MATERIAL

INTENTIONALLY OMITTED

OCTOBER 2024

BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

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 LKB-4

HIGHLY SENSITIVE
PROTECTED MATERIAL

INTENTIONALLY OMITTED

OCTOBER 2024

Monitoring Procedures and Reports
Related to the North Louisiana Customer Project

1. *Monitoring Procedures and Reports*

The Company will submit quarterly progress reports concerning the Planned Generators[1] and the Sarepta-to-Mount-Olive Transmission Facilities[2] (collectively, the "ELL Generation and Transmission Project") to the Staff and any intervenors within 45 days of the end of March, June, September, and December of each year. The contents of the report may be largely confidential, with the exception of a non-confidential summary. Any quarterly report containing confidential or proprietary information of ELL or its vendors, consultants, or contractors may be submitted on a confidential basis to the Staff and to appropriate reviewing representatives of intervenors that have executed a confidentiality agreement in this docket, in which case a public redacted version of such report will be filed in the docket and circulated to all parties. The Staff will use its best efforts to acknowledge receipt of the report, in writing, and provide any questions regarding the report within 30 days of the submission of thequarterly monitoring report. The Company also will provide to the Staff informal reports of any significant developments occurring between the more formal quarterly reports. The Company will arrange for the Staff to undertake site visits once or twice per year, or as deemed necessary.

2. *Quarterly Report Elements*

The quarterly progress monitoring reports will include the following information:

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[1] The phrase "Planned Generators" is defined as the three Combined Cycle Combustion Turbine ("CCCT") generators being built in connection with the referenced North Louisiana Customer Project.

[2] The phrase "Sarepta to Mount Olive Transmission Facilities" is defined to mean the 230 kV line from the Sarepta Substation to the Mount Olive Substation and the second autotransformer to be constructed at the Mount Olive Substation.

Summary of Status of ELL Generation and Transmission Project Schedule

An overview of major items accomplished (such as construction or procurement activities) with respect to the ELL Generation and Transmission Project:

1. Description of any changes to planned activities (or milestones) that have implications for project schedule or task sequencing; and
2. Overall project schedule status.

The information in this section will be sufficiently detailed to understand the relationship between the current schedule and the original schedule, including any changes to major project milestones.

ELL Generation and Transmission Project Budget Status

Each report will provide a table that identifies: (a) the original cost estimate; (b) expenditures to date; (c) estimated future spending; (d) cost estimate revisions (due to change orders or other reasons); and (e) any budget variance. These data will be broken down as: (a) EPC payments; (b) Other vendors/expenses; (c) Entergy labor; (d) Indirect costs; (e) Allowance for Funds Used During Construction ("AFUDC"); (f) project contingency; (g) and transmission interconnection to switchyard.

Business Issues

This section will provide for the identification of other business issues pertinent to the ELL Generation and Transmission Project. It will include but not be limited to material business disputes with contractors, force majeure issues, labor problems or disputes, and any issues or problems associated with local government or the local community. This will also include any important amendments to the EPC contracts, the status of Customer's performance of its obligations under its agreements with the Company, and any developments in the Company's

business relationship with the Customer that are pertinent to the ELL Generation and Transmission Project.

Safety

The Company will provide, in each progress report, tables reporting the recordable incident rate ("IR") and lost workday injury and illness rate ("LWDII") information for the project or similar information relating to work-related safety statistics. This will be provided by month and cumulatively for the entire construction period for the Company, the EPC contractor(s), and other project contractors and subcontractors.

Environmental Compliance

The progress report will identify any environmental permitting or compliance issues that arise and that could affect the ELL Generation and Transmission Project. Environmental issues discussed in this section will include any permit modification or new requirements. In addition, the Company will report on new environmental laws or regulations that have the potential to affect the ELL Generation and Transmission Project.

Additional Matters

In addition to the information described above, the quarterly report will include an Executive Summary highlighting progress on the ELL Generation and Transmission Project, significant changes to the project plan and other notable developments. To the extent not provided elsewhere, the Company will include the following information in its report:

(1) updates in the Company's forecasted cost of natural gas;

(2) material changes in the cost to complete the ELL Generation and Transmission Project;

(3) material incremental changes in the cost of environmental compliance; and

(4) an affirmation as to whether continuing construction of the ELL Generation and Transmission Project remains in the public interest.