

March 22, 2024

**BY HAND DELIVERY** 

Mr. Brandon Frey Louisiana Public Service Commission 602 North Fifth Street Baton Rouge, Louisiana 70802

#### Re: Application of Entergy Louisiana, LLC for Exemption and/or Certification of the West Bank 230kV Transmission Project in Accordance with Louisiana Public Service Commission General Order Dated October 10, 2013 (LPSC Docket No. U-\_\_\_)

Dear Mr. Frey:

I have enclosed, on behalf of Entergy Louisiana, LLC ("ELL" or the "Company"), the original and three copies of the Company's Application for Exemption and/or Certification of the West Bank 230kV Transmission Project in Accordance with Louisiana Public Service Commission General Order Dated October 10, 2013. The Application is supported by the Direct Testimony and Exhibits of Phillip R. May, Laura K. Beauchamp, Daniel Kline, Bradley D. Skok, Catherine R. Ward, and Ryan D. Jones. Please retain the original and two copies for your files and return a date-stamped copy to our courier.

I have also enclosed five copies of the Confidential Version of the referenced filing, which is being provided under seal pursuant to the provisions of the LPSC General Order dated August 31, 1992, and Rules 12.1 and 26 of the Commission's Rules of Practice and Procedure. The confidential materials included in the filing consist of competitively sensitive market information or sensitive infrastructure information, the disclosure of which may create an artificial target for suppliers/vendors or create physical security risks. For this reason, this material is confidential and commercially sensitive. The disclosure of the information contained herein would subject not only the Company, but also its customers, to a substantial risk of harm. Accordingly, it is critical that this information remain confidential.

Please retain the appropriately marked Confidential Version for your files and return a date-stamped copy to our courier. Additional copies of the Confidential Version of this filing will be provided to appropriate representatives of the LPSC Staff and made available to other interested parties once a suitable Confidentiality Agreement has been executed.

If you have any questions, please do not hesitate to call me. Thank you for your courtesy and assistance with this matter.

Sincerely,

Mustham

Matthew T. Brown

Enclosures

cc: LPSC Commissioners (*public version only via electronic mail*) Phillip R. May Lawrence J. Hand, Jr.

# **BEFORE THE**

# LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY	
LOUISIANA, LLC FOR EXEMPTION	
AND/OR CERTIFICATION OF THE	
WEST BANK 230kV TRANSMISSION	
<b>PROJECT IN ACCORDANCE WITH</b>	
LOUISIANA PUBLIC SERVICE	
COMMISSION GENERAL ORDER	
DATED OCTOBER 10, 2013	

DOCKET NO.

## **APPLICATION**

# OF

# ENTERGY LOUISIANA, LLC

**MARCH 2024** 

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## APPLICATION OF ENTERGY LOUISIANA, LLC FOR EXEMPTION AND/OR CERTIFICATION OF THE WEST BANK 230kV TRANSMISSION PROJECT IN ACCORDANCE WITH LOUISIANA PUBLIC SERVICE COMMISSION <u>GENERAL ORDER DATED OCTOBER 10, 2013</u>

Entergy Louisiana, LLC ("ELL" or the "Company") respectfully submits this Application seeking, consistent with the Commission's Transmission Siting Order,<sup>1</sup> an exemption from certification by the Louisiana Public Service Commission (the "Commission" or "LPSC") with respect to the construction of the portfolio of transmission projects required to add (1) a new 500/230kV Substation ("Commodore Substation") on the West Bank of the Mississippi River ("West Bank") in ELL's Amite South Planning Region ("Amite South")<sup>2</sup> in Iberville Parish, Louisiana and (2) approximately 60 miles of new 230kV transmission line to connect the existing Waterford Substation to the new Commodore Substation (the "West Bank 230kV Project" or the "Project"), on the basis that the Project is being undertaken by the Company for the primary purpose of accommodating electric service to two new industrial block loads to be located on the West Bank, one associated with the expansion of existing customer facilities and the other associated with a new industrial plant (together, the "New 230kV Block Loads").

Alternatively, in the event the Commission determines that the West Bank 230kV Project or any part of the Project does not qualify for an exemption under the Transmission

<sup>&</sup>lt;sup>1</sup> See General Order (October 10, 2013), In re: Determination as to Whether the Commission Should Issue a General Order Asserting Jurisdiction Over the Certification of Utility Transmission Projects and the Determination of Whether Those Projects Are in the Public Interest ("Transmission Siting Order"), Docket No. R-26018, Id. at Section VIII(6).

 $<sup>^2</sup>$  The Amite South planning region is generally described as the area extending east from the Baton Rouge metropolitan area to the Mississippi state line and extending south from the Amite Substation to the Gulf of Mexico.

Siting Order, the Company requests certification by the Commission, under the Transmission Siting Order, that the public convenience and necessity would be served by the completion and siting of the Project.

The Company's Application, including its supporting testimony and exhibits, provides (1) the information required to support the application of the exemption established at Section VIII(6) of the Transmission Siting Order or, alternatively, (2) the information required pursuant to Section V of the Transmission Siting Order for timely certification that the public convenience and necessity will be served by the completion and siting of the Project. In addition to the requested finding of an exemption and/or certification, the Company respectfully requests a finding that the actual retail revenue requirement associated with the prudently incurred costs of the West Bank 230kV Project is deemed eligible for recovery by the Company through the appropriate recovery mechanism at the time that the components of the West Bank 230kV Project are placed in service, and the development of a schedule and procedures to permit this Application to be considered on a timely basis. The Company shows as follows:

#### I. INTRODUCTION

ELL is a limited liability company duly authorized and qualified to do business in the State of Louisiana, created and organized for the purposes, among others, of manufacturing, generating, transmitting, distributing, and selling electricity for power, lighting, heating, and other such uses.

The portfolio of transmission projects that comprise the West Bank 230kV Project, which is currently estimated to cost \$498.8 million, will provide the injection of a new 230 kilovolt ("kV") transmission line into the Amite South region, for which the Company has load

additions of 5,000 megawatts ("MW") under study by Entergy Services, LLC's ("ESL")<sup>3</sup> for the commencement of service between 2023 and 2030. As discussed by Company witnesses Phillip R. May and Laura K. Beauchamp, this filing is a critical step in seizing a generational opportunity for economic resurgence currently presented for the State of Louisiana, the Amite South planning region that the Company serves, and the Commission. This opportunity arises from the burgeoning needs of businesses and industries who already call Louisiana home or seek to do so. The Amite South region is undergoing substantial industrial growth and is poised for even greater economic expansion if the Company, with the Commission's oversight and support, provides the transmission capacity and resources necessary to accommodate the electrical needs of the various companies seeking to locate or expand their facilities in the region.

The West Bank 230kV Project is part of a multi-phased initiative by the Company to ensure it has adequate transmission and generation capacity to accommodate these new bulk loads in a timely and efficient manner. In a series of filings before the Commission, including this Application, the Company seeks the Commission's approval to move forward with (or provides the Commission with notice of) a necessary and comprehensive portfolio of transmission projects in Amite South (the "Amite South Transmission Project" or "ASTP") required to accommodate the significant load growth presented by this generational

<sup>&</sup>lt;sup>3</sup> ESL is the service company affiliate of the Entergy Operating Companies ("EOCs") that provides engineering, planning, accounting, technical, regulatory, and other administrative support services to each of the EOCs. The EOCs include ELL; Entergy Mississippi, LLC ("EML"); Entergy Arkansas, LLC ("EAL"); Entergy New Orleans, LLC ("ENO"); and Entergy Texas, Inc. ("ETI").

opportunity.<sup>4</sup> Each of the Company's transmission projects being presented to the Commission in this series of filings has been approved by the Midcontinent Independent System Operator, Inc. ("MISO").

Importantly, the window of time in which to act is limited. Businesses and industries presently pursuing new locations or expansions in the Amite South region have the option to expand or locate their businesses – and the jobs and other community benefits that come with them – elsewhere. The Company and the Commission must act now to secure the benefits offered by this opportunity. Those benefits will be transformative for the economy of Louisiana and the lives of its citizens and difficult to overstate. The industrial load growth that comes with the economic expansion in the Amite South region will be responsible for the creation of good-paying jobs for Louisiana residents and revenues for local governments and our communities — all of which increase the quality of life for Louisiana citizens. Recognized Louisiana economist, Dr. Loren Scott, has concluded that the positive economic impact of the new and expanding industries associated with the industrial growth in Amite South will be immense to both the region and the State of Louisiana, including an estimated:

- 8,356 new jobs annually;
- \$29.8 billion in new sales at businesses in the River Region; and

<sup>&</sup>lt;sup>4</sup> The ASTP includes transmission projects on the West Bank and East Bank of the Mississippi River in Amite South, with the largest growth projected to occur on the West Bank given the availability of land ready for development. Summarizing the major parts, the West Bank projects include the West Bank 230kV Project (providing a new substation and new 60-mile 230kV transmission line) and the West Bank 500kV Project (providing a new 88-mile 500kV line). The East Bank projects include a new substation (the Audubon Substation) and new 21-mile 230kV transmission line (Willow Glen-Conway-Audubon). In addition to its Company-wide transmission construction plan (of which the ASTP is a vital part), ELL will also be moving forward with other strategic projects that include its generation portfolio expansion and grid resilience plan, all of which will be needed to accommodate the industrial growth that results from this generational opportunity.

• \$1.1 billion in new revenues to local government.<sup>5</sup>

The areas in which this growth would occur include areas that have historically struggled with high levels of poverty and the accompanying challenges. The jobs and revenues to local businesses and governments that would flow from these investments present an historic opportunity to reduce that poverty, to provide needed revenues to invest in roads, schools, and other infrastructure, and to improve the lives of the Louisianans who live and work in these areas.

The Commission can enable this growth opportunity by establishing a regulatory environment in Louisiana that leverages the Amite South region's inherent advantages, such as the Mississippi River and deepwater port access, and that clears the way for the Company to develop the infrastructure needed for these businesses to follow through on their plans to select southeast Louisiana as the location for their monumental investments, thereby unlocking the sizable benefits discussed in the report by Dr. Scott.

Appropriate governmental entities within Louisiana, including the State's executive branch, are taking proactive steps to position Louisiana for economic growth. As the regulatory body overseeing the development of the State's electrical infrastructure, the LPSC plays a paramount role in setting policies and regulations that will influence Louisiana's economic future. Many of ELL's actions with respect to this generational opportunity for economic resurgence will involve – and are subject to the oversight of – the Commission. As noted above, this is one of a series of applications the Company has filed or will file before the Commission seeking its consent and support to expand and update ELL's load-serving

<sup>&</sup>lt;sup>5</sup> See Dr. Loren Scott, Stringing Lines: The Economic Case for Incremental Entergy Louisiana Infrastructure, at 14 (2023).

infrastructure in order to accommodate and capitalize upon this tremendous economic growth opportunity for the State of Louisiana and the Amite South region. The outcomes of these proceedings will be critical to whether the State and ELL remain competitive and attractive to businesses looking to expand in or locate in Louisiana. It is reasonable to conclude that, if the Company's load-serving capability in the region is not increased, there is a substantial risk that prospective industrial customers planning to locate or expand in the region will seek another site with another supplier, with the likely result of locating their new facilities outside of Louisiana.

## **II. COMPANY WITNESSES**

With this Application, the Company submits the Direct Testimonies of Phillip R. May,

Laura K. Beauchamp, Daniel Kline, Bradley D. Skok, Catherine Ward, and Ryan D. Jones.

The purpose of the testimony of each witness is as follows:

- <u>Phillip R. May</u> Mr. May is the President and Chief Executive Officer ("CEO") of ELL. In his Direct Testimony, he describes the significance of this Application before the Commission. In doing so, he explains why this filing is a critical step in seizing a generational opportunity for economic resurgence currently presented for the State of Louisiana, the Amite South planning region, and the Commission; and he describes the Commission's important role in overseeing and facilitating the expansion of the Company's infrastructure to accommodate and foster this economic growth.
- <u>Laura K. Beauchamp</u> Ms. Beauchamp is the Director, Resource Planning and Market Operations, for the Company. She identifies the other ELL witnesses whose Direct Testimony supports this filing and provides a summary of their testimony. She also describes the anticipated and unprecedented load growth in Amite South, which anticipated load growth is a key driver of the need for substantial transmission infrastructure development in Amite South; and she describes how the West Bank 230kV Project is a significant step with respect to a larger transmission portfolio to enhance existing transmission infrastructure and build new infrastructure necessary to provide additional loadserving capability in Amite South, ensure reliability in the corridor, and drive economic development for the State.

- <u>Daniel Kline</u> Mr. Kline is the Director, Power Delivery Planning, within the Project and Portfolio Development group of the ESL Power Delivery Organization and is responsible for the analysis and identification of transmission projects that are needed to reliably serve the EOCs' customers. He provides an overview of the Entergy Transmission System and ELL's Transmission System. He also provides an overview of the various steps in the transmission planning process employed to develop transmission projects such as the West Bank 230kV Project, including the role of MISO.
- <u>Bradlev D. Skok</u> Mr. Skok is the Manager, Transmission Planning, within the Power Delivery Planning group of the ESL's Power Delivery Organization and is responsible for the analysis and identification of new transmission facilities needed to reliably serve new electrical load, such as the New 230kV Block Loads. He explains the Company's and MISO's analyses that demonstrate the necessity of the West Bank 230kV Project for ELL to reliably serve the New 230kV Block Loads, including a discussion of the documentation showing that the purpose of the Project is to accommodate the needs of the New 230kV Block Loads. Mr. Skok further explains that all components of the ASTP, including the West Bank 230kV Project, are necessary for ELL to provide electric service to the block load additions incorporated in the studies that led to the development of the ASTP.
- <u>Catherine Ward</u> Ms. Ward is the Director, Project Management Capital Projects in ESL's Capital Projects organization and is responsible for developing and delivering large transmission projects in areas served by the EOCs, including ELL. Ms. Ward discusses the Company's plan for designing and constructing the new transmission facilities that make up the West Bank 230kV Project, along with a schedule outlining the Project's milestones. She further provides a general description of each component of the West Bank 230kV Project, as well as the current estimated cost of constructing the new facilities, their proposed locations, maps, and illustrations of the new transmission facilities.
- <u>**Ryan D. Jones**</u> Mr. Jones is the Manager, Regulatory Affairs, for ELL. He describes the requirements of the Siting Order and how the testimony and exhibits included with the Company's Application provide (1) the information that shows that the West Bank 230kV Project qualifies for an exemption to the certification requirement under the Siting Order and (ii) in the alternative, the information required for the Commission to certify that the West Bank 230kV Project serves the public convenience and necessity and is in the public interest in compliance with the Siting Order. In addition, Mr. Jones provides the estimated revenue requirement of the Project as well as a discussion of the potential bill effects associated with the Project.

Through this Direct Testimony and accompanying exhibits, the Company provides all of the information necessary to establish and support the basis for a determination that the West Bank 230kV Project is exempt from certification under Section VIII(6) of the Transmission Siting Order, as well all of the information required by Section V of the Transmission Siting Order to establish and support a Commission determination that the public convenience and necessity will be served by the completion and siting of the Project.

#### **III. COMPONENTS OF THE WEST BANK 230KV PROJECT**

As described by Company witness Catherine R. Ward, the West Bank 230kV Project includes the following components:<sup>6</sup>

## • Commodore 500/230kV Substation

- Build a new 500/230kV substation with the 230kV configured in a breaker and a half scheme with nine 230kV circuit breakers.
- 500kV to be configured in a four-breaker ring including a 500/230kV autotransformer bank including one spare phase.
- New property acquisition is required in Iberville Parish, including an estimated 46 acres of land for substation and line cut-ins.
- The substation will cut-in to the following existing transmission lines: Richardson-Wise 230kV line, Iberville-Derrick 230kV line, and Bayou LaButte-Webre 500kV line.
- Remote end relay and settings upgrades required at the following substations: Derrick 230kV, Iberville 230kV, Webre 500 kV, and Bayou LaButte 500kV. Settings-only upgrades required at the following substations: Richardson 230 kV and Wise 230kV.

<sup>&</sup>lt;sup>6</sup> As explained by Ms. Beauchamp and Mr. Skok in their Direct Testimony, the instant Application concerns the 230kV elements of the Company's West Bank Waterford to Commodore transmission project. The Company will file a separate certification application regarding the 500kV portion of the Amite South Reliability Project selected by MISO in the MTEP23 process.

# • Waterford 230kV Substation Upgrade

- Upgrade relay panels and settings at the existing substation. At this point we do not anticipate that an expansion of the substation is necessary.
- No property acquisition required; work to be constructed on Companyowned property.
- Waterford Commodore 230kV Transmission Line
  - Build a new 60-mile 230kV Line from Waterford 230kV Substation to Commodore 500/230kV Substation.
- Right of Way ("ROW") Acquisition for Waterford Commodore 230kV and 500kV Transmission Lines
  - Acquire approximately 60 miles of new ROW for both the 230kV and 500kV lines between the Commodore and Waterford Substations. The lines will predominantly run parallel; new ROW to be acquired includes an estimated 2,023 acres between Commodore and Waterford Substations.
  - Acquire new 500kV ROW between Waterford Substation and Churchill Substation. Estimated length is 28 miles.
- Iberville Commodore 230kV Line Rebuild
  - Rebuild approximately 3.6 miles of line to > 1900A.
- Distribution Lines
  - Distribution lines located in the Project location are under evaluation to determine if they meet required clearances with the installation of the new facilities.
  - The distribution scope includes routing temporary construction power (approximately 0.7 mile) to the Commodore Substation from an existing nearby distribution line and to provide a 300kVA transformer for permanent power to the substation. Construction will be predominantly overhead to the west of Commodore Substation and will transition to underground as the line approaches the substation.

## IV. LOCATION AND MAPPING OF THE PROJECT

To illustrate the location and construction of the components of the West Bank 230kV Project, Ms. Ward's Direct Testimony includes the following exhibits:

- Exhibit CRW-1 (HSPM): This is a generalized substation-to-substation routing of the new and modified substations and transmission lines in the Project. The general locations of the new and/or modified substations and transmission lines associated with the Project are in St. Charles Parish, St. John the Baptist Parish, St. James Parish, Assumption Parish, Ascension Parish, Iberville Parish, and Jefferson Parish, Louisiana. Exhibit CRW-1, which contains highly sensitive protected materials ("HSPM"), includes illustrations of the routing of both the components of the West Bank 230kV Project included in this Application as well as the additional components that will compose the remainder of the ASTP to be included in a subsequent filing (which additional components are described in the Direct Testimonies of Ms. Beauchamp and Company witness Bradley Skok).
- <u>Exhibit CRW-2</u>: This is a scoping diagram of the Project components.
- <u>Exhibit CRW-3</u>: This includes illustrations of the standard typical pole sections that will be used for the construction of the new and rebuilt transmission line sections.
- <u>Exhibit CRW-4</u>: This includes diagrams of the new Commodore Substation, including both the 230kV and 500kV elements.

## V. ECONOMIC RESURGENCE OF THE AMITE SOUTH REGION

The Amite South region is experiencing unprecedented load growth, particularly with respect to forecasted block load increases in the industrial sector.

ELL's service area, divided into its five planning areas, is depicted in **Figure 1** below. Amite South is a sub-region of the Southeast Louisiana Planning Area ("SELPA") and is a historical load pocket, in which the capability of the transmission system is inadequate to import sufficient energy and capacity, such that ELL must rely on local generation to meet demand and reliably maintain system stability within that load pocket. Included within Amite South is the Downstream-of-Gypsy ("DSG") sub-region that is also its own load pocket. Amite South contains the State's largest metropolitan area as well as a significant amount of existing and potential high load factor industrial customers, and it relies substantially on local generation and imports to serve the region's peak load and transmission requirements.



Figure 1

As discussed by Ms. Beauchamp, the Company has roughly 5,000 MW of load additions on the West Bank in Amite South being evaluated by ESL for electric service commencing during the period between 2023 and 2030. If all 5,000 MW were to materialize, it would constitute a 300% increase in the region's current load. Additionally, as forecasted in January of this year, Mr. May's Exhibit PRM-3 (Ms. Beauchamp's Exhibit LKB-2) shows eighteen (18) new block loads totaling nearly 3,900 MW set to develop along the West Bank in Amite South.

While the Company cannot say with certainty that every one of these new block loads will materialize, the preponderance of interest in the region clearly indicates that it is eminently reasonable to conclude that a critical mass of these new loads will in fact materialize as long as the right infrastructure is put in place to accommodate their needs. As Ms. Beauchamp explains in her Direct Testimony, this wave of development is driven by a significant surge in projects designed to address clean energy initiatives spurred by tax credits made available under the Inflation Reduction Act. These clean energy projects are ideally suited for the Amite South region in conjunction with Louisiana's traditional competitive advantages, such as a comprehensive pipeline network, the Mississippi River, deep water ports, railways and airports. Louisiana also has an available and adaptable workforce as well as educational institutions that are preparing the workforce of the future.

New industry development is also driving load growth in areas such as liquefied natural gas ("LNG") exports, chemical manufacturing and, increasingly, energy transition investment focused on reduced carbon intensity. According to the Louisiana State University ("LSU") Center for Energy Studies' 2024 Gulf Coast Energy Outlook, the Gulf Coast has seen over

\$262 billion in announced energy manufacturing investment since 2013, of which, Louisiana's share is \$144 billion or 55%.<sup>7</sup>

The above-identified factors indicate that both the State of Louisiana and the Amite South region have a real opportunity not only to maintain the strength of Louisiana's industrial sector, but also to help it grow exponentially. The necessary infrastructure must be in place to timely meet that growth.

#### VI. DEVELOPMENT OF THE PROJECT

#### A. Transmission Planning Process

#### 1. Overview of Entergy and ELL Transmission Systems

As Company witness Daniel Kline explains, the Entergy Transmission Facilities span portions of five states (Arkansas, Louisiana, Mississippi, Texas, and Missouri) and are comprised of approximately 16,000 circuit miles of transmission lines. In addition to the lines, there are more than 1,500 substations across the system. Employees and assets based at various locations throughout the areas served by the Entergy Operating Companies are used to plan, operate, and maintain these facilities.

The ELL transmission system is comprised of approximately 5,267 circuit miles of transmission lines. The ELL transmission system is composed of 69 kV, 115 kV, 138 kV, 230 kV, 345 kV, and 500 kV transmission lines and substations, and it extends across the footprint of the State of Louisiana.

The Entergy Transmission Facilities are used to move high-voltage bulk electric power produced by market participants within MISO across an interconnected system of transmission

<sup>&</sup>lt;sup>7</sup> Upton, Gregory B., Dismukes, David E., and Albrecht, Greg, *Gulf Coast Energy Outlook,* LSU Center for Energy Studies (2023), *available at* <u>https://www.lsu.edu/ces/publications/2023/gceo\_2024.pdf</u>, at p. 25.

lines and substations to distribution points for delivery to the approximately 3 million retail customers of the EOCs, as well as to other transmission system users such as municipalities and cooperatives, and to points of delivery into other transmission systems. The Entergy Transmission Facilities also deliver power directly, at transmission-level voltages, to a number of large commercial and industrial retail customers of the EOCs. These transmission-level retail customers include refineries, chemical plants, oil and gas processing facilities, pumping stations, and large manufacturing sites vital to the economies of the Amite South region, the State of Louisiana, and the nation. The New 230kV Block Loads are transmission-level customers.

#### 2. Entergy's Planning Process

Reliable transmission infrastructure is critical to ensure that ELL can reliably support industries locating in the areas of Louisiana that the Company serves, to ensure that inadequate infrastructure does not become an impediment to that development and the economic benefits to Louisiana associated with that development, and to continue to reliably serve all customers. As Mr. Kline explains, to meet these goals, in addition to its own internal standards, the Entergy Transmission System is planned, designed and operated in accordance with national and regional reliability standards and guidelines.

Transmission planning is performed to ensure that the interconnected Entergy Transmission System: (1) remains compliant with applicable North American Electric Reliability Corporation ("NERC") Reliability Standards, standards of the SERC Reliability Corporation ("SERC"), and each EOC's local planning criteria; and (2) is designed to deliver energy efficiently to end-use customers at the lowest reasonable cost. Expansion of, and enhancements to, transmission facilities must be planned well in advance of the need for such improvements given that regulatory processes, permitting processes, and construction activities can take multiple years to complete.

As a Transmission Owner in MISO, the Company's transmission system is planned in accordance with the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff ("MISO Tariff"). On behalf of the Company, ESL oversees the preparation of annual assessments of the Company's transmission facilities and conducts local reliability planning through MISO's reliability planning process. To do so, ESL applies the NERC and SERC reliability standards and local planning criteria to identify upgrades needed to maintain reliable service to existing customers and accommodate future load growth. The product of this process is a local reliability plan that is approved by the EOCs and provided to MISO for use in its overall regional planning process.

#### 3. Role of MISO

As Mr. Kline explains, the process of planning the transmission grid in the MISO region is guided by four different, but related, points of view: (1) top-down regional (or MISO-wide) planning, (2) bottom-up (or locally driven) planning, (3) access planning (which includes transmission-service-request and generator interconnection-driven transmission planning), and (4) state/federal policy-driven planning. The result of this process is a plan for the enhancement of the transmission grid in MISO. This plan is referred to as the MISO Transmission Expansion Plan ("MTEP").

The MTEP process includes opportunities for input from various stakeholders and participants, including meetings and the submission of written comments. Local reliabilitydriven projects are generally developed in the bottom-up process, which relies on the identification of need by the local Transmission Owners and analyzes that need (and the proposed solution) with significant stakeholder review and input. Transmission access planning is driven by customers requesting generator interconnection and transmission service.

No matter how a project is developed, the MTEP process relies on MISO's broad analysis of the MISO transmission system (and its neighboring systems), stakeholder review of and input on that analysis and proposed projects, and, ultimately, a decision from the MISO Board of Directors (the "MISO Board") regarding approval of any projects recommended to it.

As Mr. Kline further explains, each MISO MTEP planning cycle is an 18-month process that begins in June of each year and concludes in December of the following year. For example, MTEP23 began its process in June 2022 with a requirement that Transmission Owners submit their proposed MTEP23 projects to address reliability no later than mid-September 2022. With respect to reliability planning, projects generally are proposed to MISO by a Transmission Owner. Based on its significant knowledge of and experience planning for its transmission system, a MISO Transmission Owner's proposal identifies reliability deficiencies on the transmission system (*i.e.*, instances in which a project is needed to address a violation of an applicable NERC standard, local planning criterion, or other reliability requirement) and recommends projects needed to address the violation. MISO selects the preferred method to mitigate any reliability deficiencies that have been identified in the proposals. MISO's study of the proposed projects is part of its annual MTEP process, which includes review of the projects with stakeholders at scheduled sub-regional planning meetings throughout the year in order to share information about the needs and drivers of the proposed projects and obtain robust stakeholder input on the proposed projects. If appropriate, MISO also optimizes the plans submitted by different stakeholders, selecting alternative projects that may address identified needs more efficiently than those proposed by individual stakeholders. At the conclusion of the MTEP planning cycle, the MISO Board considers for approval the projects recommended by the MISO planning staff that are determined to effectively and efficiently meet reliability needs.

Mr. Kline explains that the West Bank 230 kV Project was developed by ESL through the bottom-up process described above, proposed to MISO, and approved, through the MTEP23 process.<sup>8</sup> As noted above, the West Bank 230kV Project is one component of a larger project that MISO approved as the "Amite South Reliability Project – Phase 1" in MTEP23. The Company will address the balance of the components of the Phase 1 Project as well as certain other projects that were approved in MTEP23 and that are necessary to serve the projected load growth in the Amite South region in filings that are expected to be made later, as appropriate, in 2024.

# B. Development of the Amite South Transmission Project (including the West Bank 230kV Project)

Reliable transmission infrastructure is critical to the Amite South region to ensure ELL can reliably continue to meet the energy needs of the industries locating there, to ensure that inadequate infrastructure does not become an impediment to that development, and to continue to reliably serve all customers in southeast Louisiana. As Mr. Skok explains, transmission studies by both ESL, on behalf of ELL, and MISO have led to the determination that additional and substantial transmission infrastructure is necessary to accommodate electric service to the

<sup>&</sup>lt;sup>8</sup> See MISO MTEP23 Appendix A – New Projects recommended for approval, available at https://cdn.misoenergy.org/MTEP23%20Appendix%20A%20-%20New%20Projects%20recommended%20for %20approval629964.xlsx, MISO Project 25242. As noted below, "Amite South Reliability Project - Phase 1" is the name of the Company's submission to MISO that included the West Bank 230 kV Project as a component part.

forecasted block load additions in Amite South over the next ten years. These studies resulted in the development of ASTP to accommodate industrial load growth in Amite South. The West Bank 230kV Project is part of the ASTP and is necessary to accommodate service to the New 230kV Block Loads, which require electric service from the Company during the early part of that period, prior to the in-service dates associated with other parts of the West Bank portion of the ASTP.

Mr. Skok explains that, currently, the transmission system in the Amite South region in the industrial corridor between Baton Rouge and New Orleans is highly constrained, meaning that the Company is unable to serve incremental load in some locations without the Company providing increased load-serving capability through additional facilities or upgrades to the transmission system, and this includes the region along the West Bank where the New 230kV Block Loads are locating. There will be no additional load-serving capability in Amite South after ELL begins service to customers for which ELL has an executed Electric Service Agreement. While there have been no violations of NERC Reliability Standards identified along the area's transmission system under current system conditions, any additional load on the system will likely create a violation. Additionally, the transmission system in this area is also a critical path for importing power into Amite South. The possible acceleration of generator deactivations in the Amite South region due to environmental rule changes would further constrain the transmission system in this corridor, as it would necessarily increase the power imports through that path.

During the transmission planning process associated with the development of MTEP23, the PDP group modeled twelve (12) industrial block load additions totaling 2,190 MW of increased load in Amite South, including the New 230kV Block Loads. An initial

study based on the current configuration of the system with the twelve block load additions incorporated as the major change in the model indicated that numerous transmission facilities would overload and low voltages would occur as a result of various transmission contingency events. Based on the Company's evaluation of the overload/low-voltage conditions identified, the PDP group developed corrective action to resolve the violations consisting of substantial transmission infrastructure improvements and new construction on the East and West Bank in Amite South. The infrastructure improvements and new construction, described below, constitute the ASTP and include the components of the West Bank 230kV Project. A subsequent study incorporating the twelve block load additions (of 2,190 MW) and the components of the ASTP verified the necessity of the ASTP to resolve the violations.

As described by Mr. Skok and Ms. Beauchamp, for the Company's submission to MISO for MTEP23, the components of ASTP were divided into phases, with Phases 1 and 2 consisting of the improvements and new construction on the West Bank and East Bank, respectively.<sup>9</sup> The West Bank 230kV Project, along with other components, is included in Phase 1 of the ASTP. All components of Phase 1 and Phase 2 of the ASTP, with those included in the West Bank 230kV Project identified, are as follows:

- ASTP Phase 1 West Bank 230kV Project (included in this Application):
  - New Commodore 500/230kV Substation;
  - Upgrade of the Waterford 230kV Substation;
  - ➢ New Waterford Commodore 230kV Transmission Line; and
  - Rebuild of the Iberville Commodore 230kV Transmission Line.

<sup>&</sup>lt;sup>9</sup> The ASTP also includes a Phase 3, which MISO is still evaluating. Phase 3 is not needed for service to the New 230kV Block Loads.

- ASTP Phase 1 West Bank 500kV Projects (to be included in a future filing):
  - ➢ Waterford 500kV Substation Expansion;
  - Churchill 500/230kV Substation;
  - ➤ New 88-mile Commodore Churchill 500kV Line; and
  - ➤ Convert the existing 230kV Waterford Churchill Line to 500kV.
- ASTP Phase 2 East Bank Projects:
  - New Audubon Substation and 7.8 miles of new transmission line for the purpose of serving a new industrial customer load on the East Bank, which are the subject of a recent ELL filing at the Commission.<sup>10</sup>
  - New 21-mile Willow Glen Conway Audubon 230kV line (to be included in a future filing).

As Mr. Skok explains in his testimony, MISO has performed an independent evaluation of the assumptions and inputs modeled in the Company's studies that provide the basis of the ASTP and the West Bank 230kV Project. As a result of its evaluation, MISO has approved all construction projects made part of Phase 1 (including the West Bank 230kV Project) and Phase 2 of the ASTP.<sup>11</sup>

Additionally, as Mr. Skok also explains, the Company has conducted an additional transmission study separate from the study that resulted in the Company proposing the ASTP

<sup>&</sup>lt;sup>10</sup> See Notice of Exemption (January 31, 2024), Entergy Louisiana, LLC's Notice of Exemption Regarding the Audubon Substation and Related Transmission Facilities Consistent with Louisiana Public Service Commission General Order Dated October 10, 2013, Docket No. S-37113.

<sup>&</sup>lt;sup>11</sup> See MISO MTEP23 Appendix A – New Projects recommended for approval, available at https://cdn.misoenergy.org/MTEP23%20Appendix%20A%20-%20New%20Projects%20recommended%20for %20approval629964.xlsx, MISO ID 25242. As noted above, ELL will be addressing the remaining components of ASTP Phase 1 and Phase 2 in filings to be made later in 2024. Phase 3 of the ASTP is still under consideration by MISO, but is not needed for service to the New 230kV Block Loads.

and submitting it to MISO for approval. This additional study (Exhibit BDS-4) evaluated the capability of the transmission system with only the New 230kV Block Loads modeled as incremental load (instead of all twelve of the block load additions incorporated in the study resulting in the ASTP) and demonstrates that the West Bank 230kV Project is not only necessary but is also sufficient to accommodate electric service to the New 230kV Block Loads without the other projects and facilities included in the ASTP.

The Company is submitting this filing for the West Bank 230kV Project separately from the 500kV components because both of the new industrial loads that make up the New 230kV Block Loads currently take, or will take, electric service at 230kV. Further, as discussed below and by Mr. Skok, the extension of service to the two New 230kV Block Loads requires the addition of only the West Bank 230kV Project – not the entirety of ASTP Phase 1. The Company is moving forward now with the West Bank 230kV Project component of ASTP Phase 1 to position itself to obtain regulatory approval of the Project in time to meet the customer project in-service date needs of the New 230kV Block Loads, subject to their timely execution of Electric Service Agreements.

The 230kV and 500kV components of the ASTP are both required to achieve the broader planning objectives described in the direct testimonies of Mr. Kline and Mr. Skok. However, there are benefits of completing the 230kV work in advance of the 500kV work – principally, the ability to serve the New 230kV Block Loads. It is currently anticipated that the construction of both lines will commence in July 2025 (although work on the Commodore Substation will start earlier, in February 2025). As noted below in Section VI, the planned inservice date for the 230kV line is December 2026, which will enable ELL to accommodate the in-service dates for the New 230kV Block Loads, as described by Ms. Beauchamp. The

planned in-service date of the 500kV line will be 16 months later because construction of the line will continue all the way to Churchill Substation (whereas the 230kV line will terminate at Waterford Substation). As Ms. Ward explains, it is the Company's intent to develop and construct the 230kV and 500kV lines in a carefully coordinated fashion to leverage the efficiencies and customer savings that can be achieved from that approach.

#### VII. TRANSMISSION SITING ORDER AND ITS EXEMPTIONS

#### A. Transmission Siting Order and Its Exemptions

As discussed by Mr. Jones, the Transmission Siting Order was the result of the LPSC rulemaking initiated in Docket No. R-26018. According to the Transmission Siting Order, a Transmission Facility is "a system of structures, wires, insulators and associated hardware, but not including switching or substations, that carry electric energy over distances and that are located in whole or in part within the State of Louisiana and furnish electric service within the state, that would be constructed and operated at or above a nominal 100kV, exceeds one mile in length, and the estimated cost to construct exceeds \$20 million."<sup>12</sup> The Transmission Siting Order provides that any utility seeking to construct a transmission project meeting the definition of Transmission Facility must first obtain LPSC certification that the project serves the public convenience and necessity, unless it qualifies for certain enumerated exemptions.

<sup>&</sup>lt;sup>12</sup> See Transmission Siting Order, Section II.A., at 9-10. The Commission initiated a proceeding in October 2021 in Docket No. R-36199 to consider whether the Transmission Siting Order should be modified so that the Commission may retain its jurisdictional authority over transmission siting in light of changes in law and transmission planning practices since the time that the Transmission Certification Order was adopted. As of the date of this testimony, no modifications to the Transmission Siting Order have been adopted.

# B. The West Bank 230kV Project Qualifies for an Exemption Because It Is Being Undertaken by ELL for the Primary Purpose of Accommodating the Needs of the New 230kV Block Loads

The West Bank 230kV Project qualifies for an exemption from the certification requirement. Section VIII(6) of the Transmission Siting Order exempts "[n]ew transmission point-of-delivery facilities, including radial lines, loop flow lines, switching stations, substations, and any other transmission projects undertaken for the primary purpose of accommodating the needs of a new or expanding industrial load or set of industrial loads located in Louisiana."<sup>13</sup>

In their Direct Testimonies, Mr. Skok, Ms. Beauchamp and Company witness Ryan Jones explain that the West Bank 230kV Project is being undertaken for the primary purpose of accommodating the needs of a new or expanding industrial load or set of industrial loads located in Louisiana (*i.e.*, the New 230kV Block Loads); and they further explain why the Project is necessary for the Company to be able to provide reliable electric service to these new and expanding industrial loads. The Project includes a new substation and several related transmission components designed to provide electric service to this new set of industrial loads. As Mr. Skok explains, the Project has been undertaken for the primary purpose of enabling the Company to serve the New 230kV Block Loads and, as demonstrated in his Exhibit BDS-2, transmission studies conducted by both ESL and MISO have confirmed that the West Bank 230kV Project is necessary for ELL to accommodate the needs of the New 230kV Block

<sup>&</sup>lt;sup>13</sup> The Commission Staff has proposed changes to the Siting Order, including modifications to the exemption at issue in this filing (Section VIII(6) of the Siting Order). Staff's proposal remains pending before the Commission. *See* Initial Staff Report and Recommendation for a Revised Siting Order (September 1, 2023), *In re: Review and Possible Modification of the Commission's General Order Dated October 10, 2013 Governing Transmission Certification and General Siting, Docket No. R-36199.* 

Loads.<sup>14</sup> Additionally, as noted above and as demonstrated in his Exhibit BDS-4, the Company has conducted an additional transmission study separate from the study that demonstrates that the West Bank 230kV Project is not only necessary but is also sufficient to accommodate electric service to the New 230kV Block Loads without the other projects and facilities included in the ASTP.

As such, the primary purpose of the Project is to accommodate the needs of a new set of industrial loads located in Louisiana, and the Project therefore qualifies for exemption under Section VIII(6) of the Commission's Siting Order.<sup>15</sup>

#### VIII. PUBLIC INTEREST DETERMINATION

#### A. The West Bank 230kV Project Will Serve the Public Convenience and Necessity

As noted above, if the Commission determines that the West Bank 230kV Project (or any component of the Project) does not qualify for the exemption from certification under Section VIII(6) of the Transmission Siting Order, the Company requests that the Commission

<sup>&</sup>lt;sup>14</sup> Those studies further confirm that the entire ASTP (including the West Bank 230kV Project) is necessary to accommodate electric service to the twelve industrial block load additions identified in Exhibit BDS-1, including the New 230kV Block Loads.

<sup>&</sup>lt;sup>15</sup> While the facts support that all components of the Project qualify for an exemption under Section VIII(6), certain individual components of the Project may also qualify under various other provisions of the Siting Order, including Sections VIII(1) (exempting new substations), VIII(5) (exempting projects needed to address violations of NERC standards), and VIII(7) (exempting projects that are in the nature of rebuilds, upgrades, or modernization or reconstruction of equipment to increase its capacity).

find that the public convenience and necessity would be served the by construction of the Project and that the Project is therefore in the public interest.<sup>16</sup>

As Mr. Jones explains, in issuing the Transmission Siting Order, the Commission acknowledged that it would certify a project it finds "to be in the public interest and the interests of affected ratepayers, enhances reliability of service, and/or provides economic benefits."<sup>17</sup> Moreover, "[i]n making that determination the Commission may consider the expected impact of such Transmission Facility on costs, retail rates, service reliability, reduction of congestion, the interstate or intrastate benefits expected to be achieved, and whether the proposed Transmission Facility is consistent with public policy."<sup>18</sup> In addition, the Commission may consider "whether construction of this Transmission Facility (as opposed to construction of another transmission facility or construction of generation, for example) is a reasonable and cost-effective solution to the problem being addressed in the Application."<sup>19</sup>

The West Bank 230kV Project surpasses these standards. As explained by Mr. Skok, the Project provides needed transmission capacity in the Amite South area, thereby maintaining and enhancing the reliability of service to all customers – both existing and future – in that

<sup>16</sup> While the Company believes the Project to be exempt from certification under the Transmission Siting Order, it is making this filing seeking confirmation of the same due to the financial significance and operational importance of the Project and recognizing that, because of those attributes, the Commission may wish to examine the Project in greater detail. There is also the potential that the Commission may find that not all components are exempted, and, in that case, commencement of construction prior to Commission certification could potentially constitute a violation of the Transmission Siting Order. Therefore, the Company is also submitting with this Filing sufficient information for the Commission to certify, as an alternative to granting the exemption, that the Project would serve the public convenience and necessity. This will ensure that there is no unnecessary delay in the execution timeline that would put at risk the realization of economic development opportunities described by Company witnesses Ms. Beauchamp and Mr. May.

<sup>17</sup> See Transmission Siting Order, Section IV, at 10.

<sup>18</sup> 

Id. 19 *Id.* at 10-11.

area. It will also facilitate opportunities to grow Louisiana's economy by providing a new 230kV source (and subsequently, a new 500 kV transmission source) into the Amite South area where, as explained by Ms. Beauchamp, the Amite South region has roughly 5,000 MW of load additions along the West Bank under study by ESL for the commencement of service during the period between 2023 and 2030, an increase of approximately 300% over the current load in Amite South if all 5,000 MW of load materialized. That growth is driven by several significant projects in Louisiana's economic development pipeline that, if brought to fruition, will bring tens of billions of dollars in additional capital investment. As Ms. Beauchamp, Mr. Kline and Mr. Skok discuss in their Direct Testimonies, reliable transmission infrastructure is critical to growing the region and the state economy and to ensuring that the industries locating here have access to the reliable power delivery systems that are needed to support their operations.

Mr. Kline and Mr. Skok also describe the studies conducted by ESL and MISO that led to the determination that the Project (together with the 500kV transmission line that will be the subject of a future certification application by the Company) is the most effective project for meeting the reliability needs of the Amite South area and will be necessary to serve the forecasted load growth in the Amite South area. Mr. Skok explains how those studies indicate that, unless the West Bank 230kV Project is completed, the Company will not be able to accommodate the needs of the New 230kV Block Loads in the Amite South area while remaining compliant with NERC standards. In addition, Mr. Skok describes how the different components of the Project provide solutions to accommodate the high area economic growth and to secure the reliability of the area's transmission grid.

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The Company's witnesses demonstrate that failure to construct the West Bank 230kV Project and the remaining components of Phase 1 of the ASTP would significantly jeopardize the ability of the Company and the Commission to accommodate the economic resurgence of the Amite South region. As Mr. Skok explains, all components of the ASTP, including the West Bank 230kV Project, are necessary for ELL to provide electric service to the twelve (12) block load additions incorporated in the studies that led to the development of the ASTP. Accordingly, as Mr. May discusses, in addition to serving the two New 230kV Block Loads, the West Bank 230kV Project is an essential step to facilitate a generational industrial growth opportunity on the West Bank and make possible the economic and reliability benefits it provides.

This historically significant economic development is expected to bring about increases in residential and commercial load as well. So again, considering the magnitude of the expected investment associated with the Project and the operational and economic significance of the Project, the Company believes that, if it is determined the Project is not exempted from certification, it would be appropriate for the Commission to make the necessary public interest determination without the need for further filings by the Company and the resulting delay.

In addition, MISO's planning staff independently evaluated the system performance for its ability to meet applicable reliability standards without the proposed project and found that the Project is needed to meet applicable reliability standards. Like the Company, MISO also evaluated other alternatives to the Project and concluded that the Project is the best alternative to address the projected reliability issues in the Amite South area. Based on all these factors, the Project is firmly in the public interest and should be certified as such by the Commission.

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# B. Information Required in Certification Filing

Through the Direct Testimonies of its witnesses, the Company has provided the information required by the Transmission Siting Order as follows:

- Requirement V.1: ELL is the Applicant in this proceeding and the only entity participating in the construction of the Project.
- Requirement V.2: Ms. Ward provides a description of each component of the Project.
- Requirement V.3: Ms. Beauchamp, Mr. Kline and Mr. Skok provide detailed explanations of the justification for the Project. In addition, Mr. Skok describes the analyses performed by ELL and MISO to determine that the Project is needed to improve reliability, accommodate projected load growth, and increase load-serving capability in a transmission-constrained region of the area served by ELL.
- Requirement V.4: Ms. Ward provides the general proposed location of each component of the Project.
- Requirement V.5: Ms. Ward discusses the anticipated source of funding for the Project.
- Requirement V.6: Ms. Ward provides the Company's current best estimate of the cost of each component of the Project, which she explains is a Class 3 estimate and is subject to change as the project is more fully developed and refined.
- Requirement V.7: Mr. Jones provide a discussion of the effect that the Project will have on customer rates.

- Requirement V.8: As an exhibit to her Direct Testimony, Ms. Ward provides single-line drawings of the typical structures anticipated to be used in constructing the Project.
- Requirement V.9: Ms. Ward discusses the current schedule and timeline for completing construction of each component of the Project and placing them in service.
- Requirement V.10: Ms. Ward explains the Company's current plans for rightof-way acquisition.
- Requirement V.11: Mr. May and Ms. Beauchamp provide other information that the Company considers relevant to support a public interest determination (*e.g.*, the need to expand the Company's infrastructure and transmission capacity to accommodate the significant industrial expansion underway in the Amite South region).

#### IX. RIGHT-OF-WAY ACQUISITION

In her Direct Testimony, Ms. Ward explains that the Company anticipates using existing ROW or paralleling existing ROW where possible. Additionally, the Company will acquire approximately 60 miles of new ROW for the Waterford – Commodore 230kV line. The width of ROW acquired will account for the new 230kV and 500kV lines running parallel from Commodore Substation to a tie point near Waterford Substation, roughly 60 miles. The Company will also acquire an additional 28 miles of ROW to be used for the Commodore – Churchill 500kV line (which will be the subject of a future certification filing at the Commission). The Company has started discussions with certain landowners along the potential routes for the new transmission line. Initial discussions include permissions for

access, survey, and soil borings. The Company has also started to issue offers for ROW acquisition along the route. The Company has also been negotiating with landowners for the properties needed to build Commodore Substation.

Ms. Ward further explains that the Company is working to acquire the ROW for the combined 230kV and 500kV lines concurrently in order to minimize the impact to landowners. The ROW width required to accommodate both lines together is narrower than would be required if the ROW width were measured separately for the two lines. In acquiring the ROW, it is more efficient to acquire the full ROW width rather than doing so in separate transactions. That approach minimizes the transaction costs, negotiation efforts and acquisition processes required to obtain the necessary ROW.

## X. PROJECT SCHEDULE

The timelines for each component of the West Bank 230kV Project are detailed below (as included in Table 1 of Ms. Ward's testimony):

Event	Start Date	Completion
Board Approval for Project	N/A	January 2024
Commodore Substation – Land Acquisition	February 2024	August 2024
Commodore Substation – Permitting	November 2024	February 2025
Commodore Substation – Construction	February 2025	November 2026
Commodore Substation – Proposed In-Service Date		November 2026
Waterford 230kV Substation Upgrade	October 2026	November 2026
Waterford-Commodore 230kV Line – ROW Acquisition	December 2023	January 2025
Waterford-Commodore 230kV Line – Permitting	June 2024	June 2025
Waterford-Commodore 230kV Line – Construction	July 2025	December 2026
Waterford-Commodore 230kV Line – Proposed In-Service Date		December 2026
	September	
Iberville-Commodore 230kV Line Rebuild	2025	October 2025

#### XI. PROJECT COSTS

Ms. Ward explains that the current cost estimate for the West Bank 230kV Project is \$498.8 million, which is the amount for which the Company has approved funding and is comprised of preliminary estimates of project costs based on the information currently available. As the Project is further developed, more refined cost estimates will be completed. Ms. Ward's testimony also summarizes the Project costs by component (in HSPM Exhibit CRW-6) and by category (in HSPM Exhibit CRW-7).

## XII. REVENUE REQUIREMENT AND ESTIMATED BILL EFFECTS

The Transmission Siting Order requires that a certification application include "[a]n analysis, with supporting data, of the estimated effects on costs to ratepayers attributable to the proposed Transmission Facility, including an estimate of the impact of the cost of the Transmission Facility on rates of all the entity's customers within Louisiana."<sup>20</sup> To comply with this requirement, Mr. Jones provides the estimated revenue requirement of the Project, based on the current estimated cost of the Project, as well as the estimated effect on a residential customer bill for a customer using 1,000 kilowatt hours ("kWh") in the area served by ELL, assuming that the Project revenue requirement were recovered on a dollar-for-dollar basis. Mr. Jones's calculations produce a total retail revenue requirement of \$57.754 million for the Project, prior to consideration of any offsets for other revenue received from transmission wholesale customers. Assuming the revenue requirement for the Project is reflected in rates on a dollar-for-dollar basis, a residential customer using 1,000 kWh per month would experience a bill increase of approximately \$1.50.

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See Transmission Siting Order, Section V.7, at 12.

The Company is not requesting any specific rate treatment of the costs of the Project at this time, as that will ultimately be addressed in the context of a rate proceeding such as an annual Formula Rate Plan ("FRP") Evaluation Report Filing, a filing to extend the FRP or some other base rate proceeding. Accordingly, the Company is not asking for Commission approval of specific recovery of the Project revenue requirement outside of the normal course of ratemaking. In this proceeding, the Company is only requesting that the costs be deemed eligible for recovery, by virtue of a Commission finding that construction of the Project is in the public interest, through the FRP to the extent the Company remains subject to one, or in the alternative to authorize the creation of a regulatory asset until such time that the costs can be reflected in rates in order to mitigate the effects of regulatory lag in the alternative where there is no FRP. In other words, if the Company's FRP is still effective at the time that the Project is placed in service, and the Company has not received approval of some specific alternative recovery for the Project, the Company would recover the revenue requirement of the Project through the normal FRP recovery mechanisms. If instead the Company is not subject to an FRP and the costs have been recorded to an approved regulatory asset, it would seek separate Commission approval for any recovery of the proposed regulatory asset through a future rate proceeding. Since no specific recovery is being requested at this time, the estimated bill effects provided by Mr. Jones may not be representative of the actual customer impact that will be seen, through an FRP or otherwise, associated with the Project, although they are reasonable estimates of those effects.

#### XIII. STATUS REPORTS

In its Order approving the Lake Charles Transmission Project ("LCTP") in Docket No. U-33645, the Commission adopted the Company's agreement (in a stipulated settlement)
to file into the record and serve on the parties to the proceeding semi-annual monitoring and status reports reflecting updates on the status of the LCTP construction and costs.<sup>21</sup> The Company filed monitoring reports beginning with the six-month period immediately following Commission approval of the LCTP and continue through completion of the Project. The Company also agreed to file a post-construction report. In the event the Commission determines that the Project is not exempt from the certification requirement under the Transmission Siting Order, the Company is willing to agree to submit similar status reports and a post-construction report following Commission certification of the Project in this docket.

#### XIV. REQUEST FOR TIMELY TREATMENT

As Ms. Beauchamp and Mr. Jones explain, the Company is not seeking expedited consideration of this Application by the Commission. The Company believes an exemption from the certification requirement is warranted for the reasons explained by Mr. Jones and described above. However, in the event the Commission does not grant the Company's requested exemption, then to the extent that the Company's Application is uncontested by LPSC Staff or Intervenors, the Company respectfully requests that the Commission may consider and issue a ruling on the Company's certification request within 90 days of the filing of the Application. If the exemption is not granted and the Company's Application is contested, then the Company respectfully requests that the Company's Application, but in any event, no later than the Commission's December 2024 Business & Executive Session. Both

<sup>&</sup>lt;sup>21</sup> See Order No. U-33645 (January 6, 2016), In re: Application for Certification of the Lake Charles Transmission Project, Docket No. U-33645, Sections VI(6) and (9), at pp. 6-7.

requested approval time frames provide for adequate review by all parties under the Transmission Siting Order. The anticipated in-service dates for the New 230kV Block Loads are identified in Ms. Beauchamp's Direct Testimony. Approval of the exemption or certification request by the Commission within the review period established by the Siting Order (*i.e.*, within 180 days of filing, if the Application is contested) would be sufficient to enable the Company to complete construction of the Commodore Substation, the new Waterford – Commodore 230kV line and other components of the Project by December 2025 (under the Project timeline presented in Ms. Ward's Direct Testimony), which would enable the Company to meet the in-service dates for the New 230kV Block Loads.

#### **XV. SERVICE OF NOTICES AND PLEADINGS**

The Company request that notices, correspondence, and other communications concerning this Application be directed to the following persons:

Lawrence J. Hand, Jr. Stacy Castaing 4809 Jefferson Highway Mail Unit L-JEF-357 Jefferson, Louisiana 70121 Telephone: (504) 840-2528 Facsimile: (504) 840-2681 <u>lhand@entergy.com</u> scastai@entergy.com

Mark Strain Duggins Wren Mann & Romero, LLP 600 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 744-9300 Facsimile: (512) 744-9399 mstrain@dwmrlaw.com Matthew T. Brown D. Skylar Rosenbloom Meta Danzey 639 Loyola Avenue Mail Unit L-ENT-26E New Orleans, Louisiana 70113 Telephone: (504) 576-4122 Facsimile: (504) 576-5579 mbrow12@entergy.com drosenb@entergy.com

L. Richard Westerburg, Jr. 6119 Willowcrest Court Spring, Texas 77389 Telephone: (512) 913-2483 <u>lrwjr54@yahoo.com</u> Entergy Louisiana, LLC Application LPSC Docket No. U-

The Company requests that the foregoing persons be placed on the Official Service List for this proceeding and respectfully request that the Commission permit the designation of more than one person to be placed on the Official Service List for service in this proceeding.

#### XVI. REQUEST FOR CONFIDENTIAL TREATMENT

Portions of the Direct Testimonies and exhibits supporting the Application contain information considered by the Company to be proprietary and confidential. Disclosure of certain portions of this information may expose the Company and its customers to an unreasonable risk of harm, including creating an artificial target for suppliers/vendors or creating physical security risks. Therefore, in light of the nature of such information, which includes commercially or competitively sensitive market information and sensitive infrastructure information, the Company has submitted two versions of the Direct Testimonies of Ms. Beauchamp, Mr. Kline, Mr. Skok, and Ms. Ward, one marked "Non-Confidential Redacted Version" and the other marked "Confidential Version." In anticipation of the execution of a suitable confidentiality agreement in this Docket, the Confidential Versions bear the designation "Highly Sensitive Protected Materials" or words of similar import. Although the confidential information and documents included with this Application may be reviewed by appropriate representatives of the LPSC Staff and interested parties pursuant to the terms and conditions of a suitable confidentiality agreement once such an agreement has been executed in this Docket, this confidential information also is being provided pursuant to, and shall be exempt from public disclosure pursuant to, the Commission's General Order dated August 31, 1992 and Rule 12.1 of the Rules of Practice and Procedure of the LPSC.

#### XVII. PRAYER FOR RELIEF

**WHEREFORE**, for the foregoing reasons, Entergy Louisiana, LLC respectfully requests that, after due and lawful proceedings are held, the Commission, subject to the fullest extent of its jurisdiction, grant relief and give its approval of the Application. In particular, the Company requests that the Commission:

- 1. Find that the portfolio of projects that comprise the West Bank 230kV Project is exempt from the certification requirements of the Commission's General Order dated October 10, 2013 in Docket No. R-26018 (the "Transmission Siting Order") by virtue of the fact that the West Bank 230kV Project is being undertaken by the Company for the primary purpose of accommodating electric service to two new industrial block loads to be located in Louisiana on the West Bank of the Mississippi River, including one new block load associated with the expansion of existing customer facilities and the other new block load associated with a new industrial plant (together, the "New 230kV Block Loads"); or
- 2. In the alternative, if the Commission finds that the West Bank 230kV Project, or any component of that Project, is not exempt from the certification requirements of the Commission's Transmission Siting Order, then find that the construction, completion and siting of the portfolio of projects that comprise the West Bank 230kV Project will serve the public convenience and necessity and be in the public interest and are therefore approved, including principally the following Project components described herein above and in the testimony of Company witness Catherine Ward:
  - a. Commodore 230/500kV Substation;
  - b. Waterford 230kV Substation Upgrade;
  - c. Waterford Commodore 230kV Transmission Line;
  - Right-of-Way Acquisition for the Waterford Commodore 230kV and 500kV Transmission Lines (including the generalized substation-to-substation corridor proposed by the Company for the new Waterford – Commodore 230kV line); and
  - e. Iberville Commodore 230kV Line Rebuild;

and further find that undertaking the construction of each those Project components would therefore be prudent and in accordance with the Transmission Siting Order and other applicable Commission orders; and

3. Find that under the circumstances described in the Company's Application, the Commission's public interest determination prior to ELL's construction of the

West Bank 230kV Project would be beneficial to the Commission and ultimately to customers;

- 4. Find that the generalized siting of the West Bank 230kV Project is appropriate and that its construction is a reasonable and cost-effective solution to provide reliable electric service as a result of the contracted and forecasted load growth in the Amite South region as described in the Company's Application;
- 5. Find that the actual retail revenue requirement associated with the prudently incurred costs of the West Bank 230kV Project, an estimate of which is provided by Company witness Ryan Jones in his Direct Testimony, is deemed eligible for recovery by the Company through the appropriate recovery mechanism at the time that the components of the West Bank 230kV Project are placed in service;
- 6. Find that, as provided in the Commission's Special Order No. 7-2000, dated March 22, 2000, the confidential testimony, exhibits, and other materials referenced in this Application shall be exempt from public disclosure pursuant to the Commission's General Order dated August 31, 1992, and Rule 12.1 of the Rules of Practice and Procedure of the Louisiana Public Service Commission;
- 7. Direct that the period for interventions and protests be shortened to 15 days;
- 8. Direct the procedural steps necessary to facilitate a Commission decision on the Company's Application within 180 days of the filing of the Application (consistent with Section X of the Commission's Transmission Siting Order) but, in any event, no later than the Commission's December 2024 Business & Executive Session;
- 9. Direct that notice of all matters in these proceedings be sent to Lawrence J. Hand, Jr., Stacy Castaing, Matthew T. Brown, D. Skylar Rosenbloom, Meta Danzey, Mark Strain, and L. Richard Westerburg, Jr. as representatives of the Company; and
- 10. Grant such other relief to which the Company shows itself to be entitled.

Entergy Louisiana, LLC Application LPSC Docket No. U-

Respectfully submitted,

By: non

Matthew T. Brown, La. Bar No. 25595 D. Skylar Rosenbloom, La. Bar No. 31309 Meta Danzey, Ms. Bar No. 103251 639 Loyola Avenue Mail Unit L-ENT-26E New Orleans, Louisiana 70113 Telephone: (504) 576-4645 Facsimile: (504) 576-5579 mbrow12@entergy.com drosenb@entergy.com mdanzey@entergy.com

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#### ATTORNEYS FOR ENTERGY LOUISIANA, LLC

#### **BEFORE THE**

#### LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY LOUISIANA, LLC FOR EXEMPTION AND/OR CERTIFICATION OF THE WEST BANK 230kV TRANSMISSION PROJECT IN ACCORDANCE WITH LOUISIANA PUBLIC SERVICE COMMISSION GENERAL ORDER DATED OCTOBER 10, 2013

DOCKET NO. U-

#### **DIRECT TESTIMONY**

#### OF

#### PHILLIP R. MAY

#### **ON BEHALF OF**

#### **ENTERGY LOUISIANA, LLC**

**MARCH 2024** 

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#### 

# EXHIBIT LIST

Exhibit PRM-1	Education, Work Background, and Responsibilities of Phillip R. May
Exhibit PRM-2	List of Previous Testimony Filed by Phillip R. May
Exhibit PRM-3	Mississippi River Corridor Westbank New Block Loads (January 2024)

# Page

1		I. <u>INTRODUCTION AND SIGNIFICANCE OF FILING</u>
2	Q1.	PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.
3	A.	My name is Phillip R. May. I am President and Chief Executive Officer ("CEO") of
4		Entergy Louisiana, LLC ("ELL" or the "Company"). My business addresses are 4809
5		Jefferson Highway, Jefferson, Louisiana 70121, and 446 North Boulevard, Baton
6		Rouge, Louisiana 70802.
7		I am testifying on behalf of ELL. My education, work background, and current
8		responsibilities are provided in Exhibit PRM-1. Exhibit PRM-2 provides a list of my
9		previous testimony.
10		
11	Q2.	PLEASE EXPLAIN THE SIGNIFICANCE OF THE COMPANY'S FILING
12		BEFORE THE LOUISIANA PUBLIC SERVICE COMMISSION.
13	A.	The Company's filing concerns the "West Bank 230kV Project," which is further
14		described below and in the Direct Testimony of Company witness Catherine R. Ward.
15		This filing is a critical step in seizing a generational opportunity for economic
16		resurgence currently presented for the State of Louisiana, the Amite South planning
17		region that the Company serves ("Amite South"), and the Louisiana Public Service
18		Commission ("LPSC" or the "Commission"). <sup>1</sup> This opportunity arises from the
19		burgeoning needs of businesses and industries who already call Louisiana home or seek
20		to do so. The Amite South region is undergoing substantial industrial growth and is

<sup>&</sup>lt;sup>1</sup> The Amite South planning region is generally described as the area extending east from the Baton Rouge metropolitan area to the Mississippi state line and extending south from the Amite Substation to the Gulf of Mexico. Company witness Laura K. Beauchamp provides further description and discussion of the Amite South region and the industrial load growth occurring in the region in her Direct Testimony.

#### Entergy Louisiana, LLC Direct Testimony of Phillip R. May LPSC Docket No. U-

1 poised for even greater economic expansion if the Company, with the Commission's 2 oversight and support, provides the transmission capacity and resources necessary to 3 accommodate the electrical needs of the various companies seeking to locate or expand 4 their facilities in the region. The West Bank 230kV Project is part of a multi-phased 5 initiative by the Company to ensure it has adequate transmission and generation 6 capacity to accommodate these new bulk loads in a timely and efficient manner. In a 7 series of filings before the Commission, including this filing, the Company seeks the 8 Commission's approval to move forward with (or provides the Commission with notice 9 of) a necessary and comprehensive portfolio of transmission projects in Amite South 10 (the "Amite South Transmission Project" or "ASTP") required to accommodate the significant load growth presented by this generational opportunity.<sup>2</sup> Each of the 11 12 Company's transmission projects being presented to the Commission in this series of 13 filings has been approved by the Midcontinent Independent System Operator, Inc. ("MISO"). 14

15 Importantly, the window of time in which to act is limited. Businesses and 16 industries presently pursuing new locations or expansions in the Amite South region 17 have the option to expand or locate their businesses – and the jobs and other community 18 benefits that come with them – elsewhere. The Company and the Commission must

<sup>&</sup>lt;sup>2</sup> The ASTP includes transmission projects on the West Bank and East Bank of the Mississippi River in Amite South, with the largest growth projected to occur on the West Bank given the availability of land ready for development. Summarizing the major parts, the West Bank projects include the West Bank 230kV Project (providing a new substation and new 60-mile 230kV transmission line) and the West Bank 500kV Project (providing a new 88-mile 500kV line). The East Bank projects include a new substation (the Audubon Substation) and new 21-mile 230kV transmission line (Willow Glen-Conway-Audubon). In addition to its Company-wide transmission construction plan (of which the ASTP is a vital part), ELL will also be moving forward with other strategic projects that include its generation portfolio expansion and grid resilience plan, all of which will be needed to accommodate the industrial growth that results from this generational opportunity.

1 act now to secure the benefits offered by this opportunity for Louisiana. Those benefits 2 are transformative for the economy of Louisiana and the lives of its citizens and 3 difficult to overstate. The industrial load growth that comes with the economic 4 expansion in the Amite South region will be responsible for the creation of good-paying 5 jobs for Louisiana residents and revenues for local governments and our communities 6 -all of which increase the quality of life for Louisiana citizens. Recognized Louisiana 7 economist, Dr. Loren Scott, has concluded that the positive economic impact of the 8 new and expanding industries associated with the industrial growth in Amite South will 9 be immense to both the region and the State of Louisiana, bringing thousands of jobs 10 annually, tens of billions of dollars in new sales at businesses in the region, and over a billion dollars in new revenues to local government.<sup>3</sup> The areas in which this growth 11 12 would occur include areas that have historically struggled with high levels of poverty 13 and the accompanying challenges. The jobs and revenues to local businesses and 14 governments that would flow from these investments present an historic opportunity to reduce that poverty, to provide needed revenues to invest in roads, schools, and other 15 16 infrastructure, and to improve the lives of the Louisianans who live and work in these 17 areas.

<sup>&</sup>lt;sup>3</sup> See Dr. Loren Scott, "Stringing Lines: The Economic Case For Incremental Entergy Louisiana Infrastructure," 14 (2023).

# 1 Q3. WHAT ROLE DOES THE COMMISSION PLAY IN THIS GROWTH 2 OPPORTUNITY?

3 A. The current business environment offers examples of regulatory processes that, 4 although well intended, can unnecessarily impede or delay rather than promote and 5 catalyze economic growth. The Commission can enable this growth opportunity by 6 establishing a regulatory environment in Louisiana that leverages the Amite South 7 region's inherent advantages, such as the Mississippi River and deepwater port access, 8 and that clears the way for the Company to develop the infrastructure needed for these 9 businesses to follow through on their plans to select southeast Louisiana as the location 10 for their monumental investments, thereby unlocking the sizable benefits discussed in 11 the report by Dr. Scott.

12

# 13 Q4. WHAT ACTION DOES THE COMPANY REQUEST FROM THE COMMISSION14 WITH RESPECT TO THIS FILING?

A. The Company requests that the Commission acknowledge that the West Bank 230kV Project facilities qualify for an exemption from the certification requirement of the Commission's Transmission Siting Order<sup>4</sup> or, in the alternative, find that the construction of these facilities is in the public interest and can proceed expeditiously so that the Company is able to undertake the significant construction and investment necessary to ensure the Amite South region and the State of Louisiana benefit from this

<sup>&</sup>lt;sup>4</sup> See General Order (October 10, 2013), In Re: Determination as to Whether the Commission Should Issue a General Order Asserting Jurisdiction Over the Certification of Utility Transmission Projects and the Determination of Whether Those Projects Are in the Public Interest ("Siting Order"), Docket No. R-26018, Id. at Section VIII(6).

1		generational opportunity to create economic development, jobs for Louisiana citizens,
2		and expansion of the tax base for the State and local government.
3		
4		II. LOAD GROWTH IN AMITE SOUTH
5	Q5.	PLEASE DESCRIBE THE LOAD GROWTH IN THE AMITE SOUTH REGION.
6	A.	The Amite South region is experiencing unprecedented load growth, particularly with
7		respect to forecasted block load increases in the industrial sector. As discussed in the
8		Direct Testimony of Company witness Laura K. Beauchamp, ELL has roughly 5,000
9		megawatts ("MW") of load additions on the West Bank of the Mississippi River ("West
10		Bank") in Amite South being evaluated by Entergy Services, LLC ("ESL") <sup>5</sup> for electric
11		service commencing during the period between 2023 and 2030. If all 5,000 MW were
12		to materialize, it would constitute a 300% increase in the region's current load.
13		Additionally, as forecasted in January of this year, Exhibit PRM-3 shows eighteen (18)
14		new block loads totaling nearly 3,900 MW set to develop along the West Bank in Amite
15		South.
16		While the Company cannot say with certainty that every one of these new block
17		loads will materialize, the preponderance of interest in the region clearly indicates that
18		it is eminently reasonable to conclude that a critical mass of these new loads will in fact
19		materialize as long as the right infrastructure is put in place to accommodate their
20		needs. Conversely, it would be irresponsible to ignore the interest and not take action

<sup>&</sup>lt;sup>5</sup> Entergy Services, LLC is the service company affiliate of the Entergy Operating Companies ("EOCs") that provides engineering, planning, accounting, technical, regulatory, and other administrative support services to each of the EOCs. The EOCs include ELL, Entergy Arkansas, LLC ("EAL"); Entergy Mississippi, LLC ("EML"); Entergy New Orleans, LLC ("ENO"); and Entergy Texas, Inc. ("ETI").

#### Entergy Louisiana, LLC Direct Testimony of Phillip R. May LPSC Docket No. U-

1 to seize the economic opportunity for Louisiana. As Ms. Beauchamp explains in her 2 testimony, this wave of development is driven by a significant surge in projects 3 designed to address clean energy initiatives spurred by tax credits made available under 4 the Inflation Reduction Act. These clean energy projects are ideally suited for the 5 Amite South region in conjunction with Louisiana's traditional competitive 6 advantages, such as a comprehensive pipeline network, the Mississippi River, deep 7 water ports, railways, and airports. Louisiana also has an available and adaptable 8 workforce as well as educational institutions that are preparing the workforce of the 9 future.

10New industry development is also driving load growth in areas such as liquified11natural gas exports, chemical manufacturing and, increasingly, energy transition12investment focused on reduced carbon intensity. According to the Louisiana State13University ("LSU") Center for Energy Studies' 2024 Gulf Coast Energy Outlook, the14Gulf Coast has seen over \$262 billion in announced energy manufacturing investment15since 2013, of which, Louisiana's share is \$144 billion or 55%.6

16 The above-identified factors indicate that both the State of Louisiana and the 17 Amite South region have a real opportunity not only to maintain the strength of 18 Louisiana's industrial sector, but also to help it grow exponentially. However, the 19 necessary infrastructure must be in place to timely meet that growth.

<sup>&</sup>lt;sup>6</sup> Upton, Gregory B., Dismukes, David E., Albrecht, Greg, *Gulf Coast Energy Outlook*, LSU Center for Energy Studies (2023), *available at* <u>https://www.lsu.edu/ces/publications/2023/gceo\_2024.pdf</u>, *Id*. at p. 5.

1		III. <u>THE ASTP AND THE COMPANY'S REQUEST IN THIS FILING</u>
2	Q6.	YOU STATE THAT THE COMPANY SEEKS THE COMMISSION'S SUPPORT
3		FOR THE ASTP THROUGH A SERIES OF FILINGS, INCLUDING THIS FILING.
4		PLEASE EXPLAIN.
5	A.	As more fully discussed by Ms. Beauchamp and Company witness Bradley D. Skok,
6		transmission studies conducted by both ESL and MISO have resulted in the portfolio
7		of proposed transmission projects that constitute the ASTP to address fundamental
8		planning objectives that include, primarily, an increase in the transmission system's
9		load-serving capability required to accommodate industrial load growth in Amite
10		South. For the Company's submission to MISO, the components of ASTP were
11		divided into phases, with Phases 1 and 2 consisting of the improvements and new
12		construction on the West Bank and East Bank, respectively. <sup>7</sup> When Phases 1 and 2 are
13		completed, ELL will have constructed in Amite South over 80 miles of new 230kV
14		lines, 88 miles of new 500kV transmission lines, two new substations, and numerous
15		conversions and upgrades of existing facilities.
16		The Company is presenting Phases 1 and 2 for Commission consideration or

18

17

review in a series of filings. On January 31, 2024, the Company filed a notice of exemption with respect to the Audubon Substation component of ASTP Phase 2 for

<sup>7</sup> The ASTP also includes a Phase 3, which MISO is still evaluating and which the MISO Board of Directors has not, as of this time, approved.

Commission review.<sup>8</sup> The West Bank 230kV Project presented in this filing is part of 1 2 ASTP Phase 1 and consists of a new 60-mile 230kV transmission line and a new 3 substation ("Commodore"). The West Bank 230kV Project is necessary to 4 accommodate service to two new industrial block loads on the West Bank totaling 380 5 MW (together, the "New 230kV Block Loads"), which require electric service from 6 the Company by December 31, 2026, and June 30, 2027, respectively, prior to the in-7 service dates associated with other parts of the West Bank projects. The Company will 8 present the remaining component projects of Phases 1 and 2 to the Commission in 9 future filings, as appropriate. 10 The Company specifically requests in this filing (1) an exemption from LPSC 11 certification under the Siting Order with respect to the construction of the West Bank 12 230kV Project on the basis that the Project is being undertaken for the primary purpose 13 of accommodating the New 230kV Block Loads, or (2) alternatively, if the 14 Commission determines that the West Bank 230kV Project (or any part of the Project) 15 does not qualify for an exemption, LPSC certification, under the Siting Order, that the

16 West Bank 230kV Project serves the public convenience and necessity.

<sup>&</sup>lt;sup>8</sup> ASTP-Phase 2 also includes the construction of the new Audubon Substation and 7.8 miles of new transmission line for the purpose of serving a new industrial customer load on the East Bank and has been made the subject of a previous ELL filing at the Commission. *See* Notice of Exemption (January 31, 2024), *Entergy Louisiana, LLC's Notice of Exemption Regarding the Audubon Substation and Related Transmission Facilities Consistent with Louisiana Public Service Commission General Order Dated October 10, 2013, Docket No. S-37113.* 

Entergy Louisiana, LLC Direct Testimony of Phillip R. May LPSC Docket No. U-\_\_\_\_

1		IV. <u>CONCLUSION</u>
2	Q7.	CAN YOU SPEAK TO THE IMPORTANCE OF THE ROLE OF THE
3		COMMISSION WITH RESPECT TO THE ASTP AND THE ECONOMIC
4		DEVELOPMENT OPPORTUNITY DISCUSSED ABOVE?
5	A.	Appropriate governmental entities within Louisiana, including the State's executive
6		branch, are taking proactive steps to position Louisiana for economic growth. As the
7		regulatory body overseeing the development of the State's electrical infrastructure, the
8		LPSC plays a paramount role in setting policies and regulations that will influence
9		Louisiana's economic future. We have before us a generational opportunity to achieve
10		an economic resurgence in Louisiana and, specifically, in Amite South. Many of ELL's
11		actions with respect to this opportunity will involve - and are subject to the oversight
12		of – the Commission. As discussed, this is one of a series of applications the Company
13		has filed or will file before the Commission seeking its consent and support to expand
14		and update ELL's load-serving infrastructure in order to accommodate and capitalize
15		upon this tremendous economic growth opportunity for the State of Louisiana and the
16		Amite South region. The outcomes of these proceedings will be critical to whether the
17		State and ELL remain competitive and attractive to businesses looking to expand or
18		locate in Louisiana. It is reasonable to conclude that, if the Company's load-serving
19		capability in the region is not increased, there is a substantial risk that prospective
20		industrial customers planning to locate or expand in the region will seek another site
21		with another supplier, with the likely result of locating their new facilities outside of
22		Louisiana.

- ELL looks forward to continuing to collaborate with the Commission on important electric policy matters that will maintain and enhance our State's position as a preferred place to do business.
- 5 Q8. DOES THIS CONCLUDE YOUR TESTIMONY?
- 6 A. Yes, at this time.

#### AFFIDAVIT

#### STATE OF LOUISIANA

#### **PARISH OF JEFFERSON**

**NOW BEFORE ME,** the undersigned authority, personally came and appeared, **Phillip R. May**, who after being duly sworn by me, did depose and say:

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

Phillip R. May

SWORN TO AND SUBSCRIBED BEFORE ME **DAY OF MARCH 2024** THIS ( **NOTARY PUBLIC** RYAN N. OURS NOTARY PUBLIC My commission expires: STATE BAR NO. 27735 STATE OF LOUISIANA MY COMMISSION EXPIRES AT DEATH

#### Phillip R. May

#### **Educational/Work Background and Current Responsibilities**

#### Educational and Work Background

I have a Bachelor of Science degree in Electrical Engineering from the University of Southwestern Louisiana, now called the University of Louisiana at Lafayette, and a Master of Business Administration from the University of New Orleans. I also completed the Wharton School's Mergers and Acquisitions program.

I have worked for subsidiaries of Entergy Corporation for over 36 years. I joined Louisiana Power & Light Company (now known as ELL) in 1986 as an Engineer in the Rates and Regulatory Affairs Department. I was responsible for developing cost of service studies to support Legacy ELL's retail and wholesale rates. I also planned and directed numerous engineering studies and special projects. In 1993, I joined the Entergy/Gulf States Utilities Merger Team as a Senior Engineer. Following that assignment, I joined Entergy Services, Inc.<sup>1</sup> to work in the Financial Planning Department and was responsible for financial planning for Entergy Gulf States, Inc. (a predecessor-in-interest to Entergy Texas, Inc., and Legacy EGSL) as well as for Legacy ELL. In 1994, I was promoted to Senior Lead Analyst in Wholesale Transactions. In that role, I worked directly with large customers to meet their wholesale power requirements. In 1995, I was promoted to Manager of Strategic Planning. The members of my group served as internal consultants to various business units. I was later promoted to the Director of Utility Transition and Development. I was responsible for analytical and strategic analysis of the regulated utilities' transition to competition efforts. In 2000, I assumed the role of Vice President, Regulatory

<sup>&</sup>lt;sup>1</sup> Entergy Services, LLC ("ESL"), formerly Entergy Services, Inc., is a service company to the five Entergy Operating Companies ("EOCs"), which are ELL, Entergy Arkansas, LLC, Entergy Mississippi, LLC, Entergy Texas, Inc., and Entergy New Orleans, LLC.

Services. In that position, I was responsible for providing technical and analytical support to all of the EOCs to enable them to satisfy their regulatory obligations. My department consisted of: System Regulatory Planning & Support, Regulatory Strategy, Regulatory Projects, and Integrated Energy Management. In February 2013, I became the President and CEO of Legacy ELL and Legacy EGSL. Legacy ELL and Legacy EGSL consummated their Business Combination in October 2015, and I continue to serve as President and CEO of the combined entity, ELL.

As my background and current duties indicate, in addition to my other areas of formal education and experience, I have particular experience with analyzing how industry trends, strategic initiatives, policy choices, and financial planning affect the Company's ability to provide safe, efficient, and reliable service at reasonable rates.

#### Current Responsibilities

As President and CEO of ELL, I have executive responsibility for the Company, including financial responsibility for the business and assets that are used to serve customers, which include generation, transmission, and distribution assets. In addition, my responsibilities include oversight of the field management of the Company's gas distribution system, customer service, economic development, regulatory affairs, public affairs, and the financial performance of ELL.

# Listing of Previous Testimony Filed by Phillip R. May

<u>DATE</u>	<u>TYPE</u>	SUBJECT MATTER	<b>REGULATORY</b>	DOCKET NO.
	<b>D</b> .		BODY	
05/31/2000	Direct	UCOS & ECOM	PUCT	22356
08/28/2000	Supplemental Direct	UCOS & ECOM	PUCT	22356
03/30/2001	Rebuttal	UCOS & ECOM	PUCT	22356
05/15/2001	Settlement	Stranded Costs	LPSC	U-22092
05/15/2001	Settlement	Stranded Costs	LPSC	U-20925
06/25/2001	Direct	Qualified Power Region	PUCT	24309
06/29/2001	Direct	Transition to Competition Costs	APSC	01-041-U
07/02/2001	Direct	Price to Beat	PUCT	24336
09/25/2001	Rebuttal	Price to Beat	PUCT	24336
05/08/2002	Supplemental	Price to Beat	PUCT	24336
07/12/2002	Supplemental Rebuttal	Price to Beat	PUCT	24336
03/01/2004	Supplemental	Business Separation Plan	LPSC	U-21453 (Sub. B)
08/25/2004	Direct	2004 Rate Case	PUCT	30123
05/17/2005	Direct	Formula Rate Plan &	Council of the	UD-01-04 &
		Generation Performance Based	City of N.O.	UD-03-01
		Resource Plan	("Council")	
07/05/2005	Direct	Capacity Rider	PUCT	31315
08/15/2005	Direct	TTC	PUCT	31544
10/05/2005	Rebuttal	Capacity Rider	PUCT	31315
02/10/2006	Rebuttal	TTC	PUCT	31544
04/26/2006	Direct	Jurisdictional Separation Plan	LPSC	U-21453 (Sub. J)
05/14/2007	Rebuttal	TTC Plan	PUCT	33687
09/26/2007	Direct	2007 Rate Case	PUCT	34800
05/02/2008	Rebuttal	2007 Rate Case	PUCT	34800
12/12/2008	Answering	Spindletop	FERC	EL08-51-002
01/09/2009	Direct	Bandwidth	FERC	ER08-1056-002
02/03/2009	Cross Answering	Spindletop	FERC	ER08-51-002
09/18/2009	Direct	PCRF	PUCT	37482
10/09/2009	Direct	Bandwidth	FERC	ER09-1224-001
12/21/2009	Direct	2009 Rate Case	PUCT	37744
09/01/2010	Direct	ICT	LPSC	S-31509
09/20/2010	Direct	ICT	Council	undocketed
10/12/2010	Answering	Depreciation Complaint	FERC	EL10-55-001
10/25/2010	Cross Answering	Depreciation Complaint	FERC	EL10-55-001
02/23/2011	Rebuttal	Depreciation Complaint	FERC	EL10-55-001
07/22/2011	Direct	MSS-4 Repricing	Council	UD-11-02
11/28/2011	Direct	2011 Rate Case	PUCT	39896
01/26/2012	Supplemental Direct	CGS	PUCT	38951
04/13/2012	Rebuttal	2011 Rate Case	PUCT	39896
04/24/2012	Supplemental Rebuttal	CGS	PUCT	38951
04/30/2012	Direct	MISO Change of Control	PUCT	40346
09/5/2012	Direct	ITC Transaction	LPSC	U-32538
09/12/2012	Direct	ITC Transaction	Council	UD-12-01
02/15/2013	Direct	EGSL 2013 Rate Case	LPSC	U-32707
02/15/2013	Direct	ELL 2013 Rate Case	LPSC	U-32708
03/28/2013	Direct	ELL Algiers 2013 Rate Case	Council	UD-13-01
04/9/2013	Direct	ELL EGSL Hurricane Isaac	LPSC	U-32674
		Storm Recovery		
05/21/2013	Rebuttal	ITC Transaction	LPSC	U-32538
05/29/2013	Errata-Rebuttal	ITC Transaction	LPSC	U-32538

<u>DATE</u>	TYPE	SUBJECT MATTER	<u>REGULATORY</u> BODY	DOCKET NO.
02/18/2014	Rebuttal	ELL Algiers 2013 Rate Case	Council	UD-13-01
04/04/2014	Rejoinder	ELL Algiers 2013 Rate Case	Council	UD-13-01
09/30/2014	Direct	ELL/EGSL Business	LPSC	U-33244
07/20/2011	Direct	Combination		0 33211
11/06/2014	Direct	FLL/FGSL Business	Council	UD-14-03
11/00/2014	Direct	Combination	Council	00 14 05
01/13/2015	Direct	EGSL Union Power Station	LPSC	U-33510
05/1/2015	Rebuttal	FLL/EGSL Business	LPSC	U-33244
05/1/2015	Rebuttur	Combination	LIDC	0 33244
06/5/2015	Direct	Ninemile 6 Prudence Review	LPSC	U-33633
07/13/2015	Settlement	FLI /FGSL Business	LPSC	U-33244
07/15/2015	Settlement	Combination	LISC	0-332++
08/25/2015	Direct	St. Charles Power Station	LPSC	U-33770
03/11/2016	Rebuttal	St. Charles Power Station	LISC	U-33770
11/2/2016	Direct	Lake Charles Power Station	LISC	U-33770
11/2/2010	Direct	Ovy PDA Amondmont		U-34203
11/13/2010	Direct	Advanced Matering System	LFSC	U-34303
11/22/2010 02/22/2017	Direct	Corville DDA	LFSC	U-34320 U-34401
02/23/2017 04/21/2017	Direct	MISO Denevuel	LFSC	0-34401
04/21/2017	Direct	Lake Charles Dower Station	LFSC	U-34447
04/24/2017	Direct	Lake Charles Power Station	LPSC	U-34283
05/25/2017	Direct	Center	LPSC	0-34472
08/21/2017	Direct	2016 FRP Extension	LPSC	U-34631
05/29/2020	Direct	ELL FRP Extension	LPSC	U-35565
06/24/2020	Direct	J. Wayne Leonard Power	LPSC	U-35581
		Station Prudence Review		
10/14/2020	Direct	ELL Laura Interim Financing	LPSC	U-35762
04/30/2021	Direct	ELL Storm Recovery Filing	LPSC	U-35991
09/8/2021	Direct	1803 Application	LPSC	U-35927
09/22/2021	Direct	ELL Ida Interim Financing	LPSC	U-36154
09/30/2021	Direct	ELL Storm Recovery Filing (3 <sup>rd</sup>	LPSC	U-35991
		Supp. App.)		
11/9/2021	Direct	ELL Solar Portfolio and Green	LPSC	U-36190
		Tariff		
12/8/2021	Direct	ELL Lake Charles Prudence	LPSC	U-36222
		Review		
01/31/2022	Direct	JDEC Nextera Joint	LPSC	U-36135
		Application		
02/14/2022	Direct	DEMCO Nextera Joint	LPSC	U-36133
		Application		
04/29/2022	Direct	ELL Ida Storm Recovery	LPSC	U-36350
12/19/2022	Direct	ELL Resilience Filing	LPSC	U-36625
01/20/2023	Direct	Concordia, Nextera, Mondu	LPSC	U-36514
		Solar Joint Application		
01/26/2023	Direct	Pointe Coupee, Nextera, Mondu	LPSC	U-36515
		Solar Joint Application		
02/02/2023	Direct	SLEMCO, Nextera, BECi Joint	LPSC	U-36516
		Application		
03/13/2023	Direct	ELL 3GW Solar Application	LPSC	U-36697
08/30/2023	Direct	ELL Rate Case Filing	LPSC	U-36959



# **MISSISSIPPI RIVER CORRIDOR WESTBANK- JANUARY 2024 UPDATE**



# **BEFORE THE**

# LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY
LOUISIANA, LLC FOR EXEMPTION
AND/OR CERTIFICATION OF THE
WEST BANK 230kV TRANSMISSION
PROJECT IN ACCORDANCE WITH
LOUISIANA PUBLIC SERVICE
COMMISSION GENERAL ORDER
DATED OCTOBER 10, 2013
,

DOCKET NO. U-\_\_\_\_

### DIRECT TESTIMONY

#### OF

#### LAURA K. BEAUCHAMP

#### **ON BEHALF OF**

# ENTERGY LOUISIANA, LLC

#### PUBLIC REDACTED VERSION

**MARCH 2024** 

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# EXHIBIT LIST

Exhibit LKB-1	List of Previous Testimony Filed by Laura K. Beauchamp
Exhibit LKB-2	Mississippi River Corridor West Bank New Block Loads (January 2024)

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

1		Entergy Services, LLC ("ESL") <sup>1</sup> and as Director of Innovation Strategy and Consulting
2		at KeyString Labs, Entergy's innovation center.
3		
4	Q4.	PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES.
5	A.	As the Director of Resource Planning and Market Operations for ELL, I am responsible
6		for managing the planning of generation, transmission, and wholesale power activities
7		for ELL. This involves working closely with ESL's generation and transmission
8		planning organizations on these activities.
9		
10	Q5.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY BODY?
11	A.	Yes. A list of my prior testimonies is attached as Exhibit LKB-1.
12		
13		II. <u>PURPOSE OF TESTIMONY</u>
14	Q6.	PLEASE EXPLAIN THE RELIEF SOUGHT BY THE COMPANY IN THIS
15		PROCEEDING.
16	A.	In compliance with the Siting Order, <sup>2</sup> ELL is seeking an exemption from LPSC
17		certification with respect to the construction of the portfolio of transmission projects
18		required to add (1) a new 500/230 kilovolt ("kV") Substation ("Commodore

<sup>&</sup>lt;sup>1</sup> Entergy Services, LLC is the service company affiliate of the Entergy Operating Companies ("EOCs") that provides engineering, planning, accounting, technical, regulatory, and other administrative support services to each of the EOCs. The EOCs include ELL; Entergy Arkansas, LLC ("EAL"); Entergy Mississippi, LLC ("EML"); Entergy New Orleans, LLC ("ENO"); and Entergy Texas, Inc. ("ETI").

<sup>&</sup>lt;sup>2</sup> See General Order (October 10, 2013), *In Re*: Determination as to Whether the Commission Should Issue a General Order Asserting Jurisdiction Over the Certification of Utility Transmission Projects and the Determination of Whether Those Projects Are in the Public Interest ("Siting Order"), Docket No. R-26018, Id. at Section VIII(6).

1	Substation") on the West Bank of the Mississippi River ("West Bank") in ELL's Amite
2	South Planning Region ("Amite South") <sup><math>3</math></sup> in Iberville Parish and (2) approximately
3	sixty (60) miles of new 230kV transmission line to connect the existing Waterford
4	Substation to the new Commodore Substation (the "West Bank 230kV Project" or
5	"Project"), on the basis that the West Bank 230kV Project is being undertaken by the
6	Company for the primary purpose of accommodating electric service to two new
7	industrial block loads to be located on the West Bank, one associated with the
8	expansion of existing customer facilities and the other associated with a new industrial
9	plant (together, the "New 230kV Block Loads").
10	Alternatively, in the event the Commission determines that the West Bank
11	230kV Project or any part of the Project does not qualify for an exemption under the
12	Siting Order, the Company requests LPSC certification, that the West Bank 230kV
13	Project serves the public convenience and necessity.
14	The Company's Application, including its supporting Direct Testimony and
15	exhibits, provides (1) the information required to support the Application of the
16	exemption established at section VIII(6) of the Siting Order or, alternatively (2) the
17	information required pursuant to Section V of the Siting Order to show that the
18	proposed construction of the Project is in the public interest.
19	

<sup>&</sup>lt;sup>3</sup> The Amite South planning region is generally described as the area extending east from the Baton Rouge metropolitan area to the Mississippi state line and extending south from the Amite Substation to the Gulf of Mexico.

# 1 Q7. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

2	A.	The purpose of my Direct Testimony is to
3		• identify the other Company witnesses whose Direct Testimony supports this
4		filing and provide a summary of their Direct Testimony;
5		• describe the anticipated and unprecedented load growth in Amite South,
6		which anticipated load growth is a key driver of the need for substantial
7		transmission infrastructure development in Amite South; and
8		• describe how the West Bank 230kV Project is a significant step with respect
9		to a larger transmission portfolio to enhance existing transmission
10		infrastructure and build new infrastructure necessary to provide additional
11		load-serving capability in Amite South, ensure reliability in the corridor,
12		and drive economic development for the State.
13		
14	Q8.	ARE OTHER WITNESSES FILING TESTIMONY IN SUPPORT OF THE
15		COMPANY'S APPLICATION IN THIS PROCEEDING?
16	A.	Yes. In addition to my Testimony and the Direct Testimony of Company witness
17		Phillip R. May, the Company's Application is supported by the Direct Testimony of
18		the following witnesses:
19		• <u>Daniel Kline</u> – Mr. Kline is the Director, Power Delivery Planning, within
20		the Project and Portfolio Development group of the ESL's Power Delivery
21		Organization and is responsible for the analysis and identification of
22		transmission projects that are needed to reliably serve the EOCs' customers.
23		He provides an overview of the Entergy Transmission System and ELL's

22

1	Transmission System. He also provides an overview of the various steps in
2	the transmission planning process employed to develop transmission
3	projects such as the West Bank 230kV Project, including the role of the
4	Midcontinent Independent System Operator, Inc. ("MISO").
5•	Bradley D. Skok – Mr. Skok is the Manager, Transmission Planning, within
6	the Power Delivery Planning group of ESL's Power Delivery Organization
7	and is responsible for the analysis and identification of new transmission
8	facilities needed to reliably serve new electrical load, such as the New
9	230kV Block Loads. He explains the Company's and MISO's analyses that
10	demonstrate the necessity of the West Bank 230kV Project for ELL to
11	reliably serve the New 230kV Block Loads, including a discussion of the
12	documentation showing that the purpose of the Project is to accommodate
13	the needs of the New 230kV Block Loads. Mr. Skok further explains that
14	all components of the Amite South Transmission Project ("ASTP"),
15	including the West Bank 230kV Project, are necessary for ELL to provide
16	electric service to the block load additions incorporated in the studies that
17	led to the development of the ASTP.
18 •	Catherine Ward – Ms. Ward is the Director, Project Management – Capital
19	Projects in ESL's Capital Projects organization and is responsible for
20	developing and delivering large transmission projects in areas served by the
21	Entergy Operating Companies, including ELL. Ms. Ward discusses the

1		outlining the Project's milestones. She further provides a general
2		description of each component of the West Bank 230kV Project, as well as
3		the current estimated cost of constructing the new facilities, their proposed
4		locations, maps, and illustrations of the new transmission facilities.
5		• <u>Ryan D. Jones</u> – Mr. Jones is the Manager, Regulatory Affairs, for ELL.
6		He describes the requirements of the Siting Order and how the testimony
7		and exhibits included with the Company's Application provide (1) the
8		information that shows that the West Bank 230kV Project qualifies for an
9		exemption to the certification requirement under the Siting Order and (ii) in
10		the alternative, the information required for the Commission to certify that
11		the West Bank 230kV Project serves the public convenience and necessity
12		and is in the public interest in compliance with the Siting Order. In addition,
13		Company witness Ryan Jones provides the estimated revenue requirement
14		of the Project as well as a discussion of the potential bill effects associated
15		with the Project.
16		
17		III. ECONOMIC DEVELOPMENT IN THE AMITE SOUTH REGION
18	Q9.	PLEASE DESCRIBE MORE FULLY THE AMITE SOUTH REGION.
19	A.	ELL's service area, divided into its five planning areas, is depicted in Figure 3 below.
20		Amite South is a sub-region of the Southeast Louisiana Planning Area ("SELPA") and
21		is a historical load pocket, in which the capability of the transmission system is
22		inadequate to import sufficient energy and capacity, such that ELL must rely on local
23		generation to meet demand and reliably maintain system stability within that load

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1 pocket. Included within Amite South is the Downstream-of-Gypsy ("DSG") sub-2 region that is also its own load pocket. The set of facilities and operational procedures 3 that are necessary to maintain reliable service within a load pocket are largely 4 influenced by changes in the generation fleet, load levels and locations, or transmission 5 topology in the region. Amite South contains the State's largest metropolitan area as 6 well as a significant amount of existing and potential high load factor industrial customers, and it relies substantially on local generation and imports to serve the 7 8 region's peak load and transmission requirements. Because of its unique circumstances 9 and needs, the Company has continually evaluated, analyzed, and studied the 10 transmission and generation and other resource planning needs of the Amite South 11 region for decades. Over the past 10 years, these efforts have focused on studying the 12 viability of adding generation to the existing fleet in advance of the retirement of ELL's 13 legacy gas-fired generating units. As a result of this assessment, ELL has constructed 14 two new generating units in Amite South: (1) J. Wayne Leonard Power Station, a 926 15 megawatt ("MW") combined-cycle gas turbine, which began commercial operation in 16 2019, and (2) the Washington Parish Energy Center, a 363 MW combustion turbine 17 which began commercial operation in 2020. Despite these additions of generation, with 18 the load growth in Amite South, additional transmission is required for the reliable 19 service of electricity to our customers.



1

Figure 3

- 2
- 3

# 4 Q10. WHAT IS THE CURRENT STATUS OF ECONOMIC DEVELOPMENT IN THE

#### 5 AMITE SOUTH REGION?

6 Amite South is experiencing unprecedented industrial growth. With regard to A. 7 economic activity as measured by customer-expressed interest in electricity consumption, the Amite South region is poised to be the fastest growing area in the 8 9 state through 2030. The region has roughly 5,000 MW of forecasted load additions for 10 ELL along the West Bank of the Mississippi River ("West Bank") under study by ESL 11 for the commencement of service during the period between 2023 and 2030, an increase 12 of approximately 300% over the current load in Amite South if all 5,000 MW of load materialized. Additionally, Exhibit LKB-2 shows eighteen (18) new block loads 13 14 totaling 3,883 MW (an approximately 250% increase in current Amite South load) that,

per a forecast in January of this year, are being evaluated for development within Amite
 South along the West Bank.

The industrial growth of the Amite South region is the result of a unique and 3 4 historic set of circumstances that have converged to give the State of Louisiana the 5 opportunity to develop and grow its economy substantially. Of particular significance 6 is the transition to clean energy. Recently enacted Inflation Reduction Act ("IRA") 7 regulations have improved the economics of producing low/zero carbon products (e.g., 8 hydrogen and ammonia) through clean energy tax credits. The IRA tax credits were 9 established to spur domestic investment in industrial production sectors to enable 10 economic viability for such projects. Additionally, the Amite South region, the area in 11 which the Project will be developed, has characteristics that are highly attractive to 12 customers who are evaluating locations for new industrial facilities - namely, 13 infrastructure in terms of existing production facilities, technical and human expertise, 14 potential offtake customers, carbon sequestration reservoirs to be able to sequester the 15 carbon, and finally, access to the Mississippi River and deep water ports to be able to 16 export these clean products globally to address worldwide demand.

Given the growth that ELL is seeing on the horizon coupled with the numerous
announcements of new and expanded industrial plants made over the past few years,
ELL commissioned Dr. Loren Scott to study the economic impact this potential growth
could mean to the State. One of the regions studied by Dr. Scott is the seven-Parish
"River Region" between (but excluding) Baton Rouge and New Orleans, which largely

1	sits within Amite South. <sup>4</sup> As noted by Mr. May, this growth presents a generational
2	opportunity to create an economic resurgence in the region and the State. Dr. Scott
3	calculates that the positive economic impact associated with this resurgence will be
4	immense, including:
5	• 8,356 new jobs annually;
6	• \$29.8 billion in new sales at businesses in the River Region; and
7	• \$1.1 billion in new revenues to local government. <sup>5</sup>
8	A robust utility infrastructure is required to enable this growth and capitalize on
9	this generational opportunity. It is critical that the Company have the necessary utility
10	infrastructure in place to reliably meet the development timetables of the economic
11	growth prospects that desire to locate and/or expand in the Amite South region. Putting
12	necessary infrastructure in place in a timely manner will require significant capital
13	investments, including investments in generation and transmission, and the Company
14	will have to manage the sizable investments required to serve this new load alongside
15	other capital requirements associated with providing affordable, reliable, sustainable
16	service to its customers. The West Bank 230kV Project is a significant step in shoring
17	up the robust infrastructure required to secure the economic benefits of this industrial
18	expansion for Amite South and the State of Louisiana.

<sup>&</sup>lt;sup>4</sup> The parishes that make up the River Region are West Baton Rouge, Iberville, Assumption, Ascension, St. James, St. John the Baptist, and St. Charles Parishes.

<sup>&</sup>lt;sup>5</sup> See Dr. Loren Scott, "Stringing Lines: The Economic Case for Incremental Entergy Louisiana Infrastructure," 14 (2023).
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## Q11. PLEASE DESCRIBE THE ECONOMIC DEVELOPMENT PIPELINE IN AMITE SOUTH.

3 A. The economic development pipeline is an extensive list of proposed industrial and 4 commercial projects in all of the various stages or phases of the project development 5 life cycle, including the initial phase of site selection, the issuance of the final investment decisions, the signing of an electric service agreement, and the final 6 commissioning and startup stage. The proposed projects in the economic development 7 8 pipeline are probability weighted based on a variety of factors and how far they have 9 been able to advance their project through the various development stages. The 10 economic development pipeline is very fluid and dynamic. Projects are constantly 11 being added, moved to a new project development stage, put on hold, or removed from 12 the list. The economic development pipeline is an important source of information 13 relied upon to assess load growth for ELL's planning processes, including its 14 transmission process discussed by Company witnesses Daniel Kline and Bradley D. 15 Skok. While the economic development pipeline is dynamic, the extensive data and 16 analytics the Company has evaluated point in a clear direction - now is the time for the 17 Company to act to develop the West Bank 230 kV Project to ensure that customer 18 projects along the West Bank and the benefits they offer for our state are realized.

1	IV.	THE ROLE OF THE WEST BANK 230KV PROJECT IN TRANSMISSION			
2		PLANNING FOR THE AMITE SOUTH REGION			
3	Q12.	HOW WILL THE PROJECTED LOAD GROWTH IN THE AMITE SOUTH			
4		REGION AFFECT THE LOAD-SERVING CAPABILITY OF THE			
5		TRANSMISSION SYSTEM IN THE REGION?			
6	A.	As explained by Mr. Skok, the Company's existing transmission system in Amite South			
7		is constrained, meaning that the Company is unable to serve incremental load in some			
8		locations without increasing the Company's load-serving capability through additional			
9		facilities or upgrades to its transmission system. Industrial load additions currently			
10		under contract will fully consume the currently available load-serving capability of the			
11		transmission system. Absent steps to address the limited capability of its transmission			
12		system in this region, ELL will not be able to serve additional customer loads in the			
13		region.			
14					
15	Q13.	HOW HAS THE COMPANY PLANNED TO ADDRESS THE NEED FOR			
16		ADDITIONAL TRANSMISSION INFRASTRUCTURE IN THE AMITE SOUTH			
17		REGION?			
18	A.	As more fully discussed by Mr. Skok, transmission studies by both ESL and MISO,			
19		have led to the determination that additional and substantial transmission infrastructure			
20		is necessary to accommodate electric service to anticipated block load additions in			
21		Amite South over the next ten years. The block load additions modeled in the studies			
22		consist of twelve (12) industrial customers and total 2,190 MW, including the New			
23		230kV Block Loads. The studies have resulted in the development of a portfolio of			

1		transmission projects, referred to as ASTP to accommodate industrial load growth in
2		Amite South. The West Bank 230kV Project is part of the ASTP and is necessary to
3		accommodate service to the New 230kV Block Loads, which require electric service
4		from the Company during the early part of that period, prior to the in-service dates
5		associated with other parts of the ASTP to be implemented on the West Bank. <sup>6</sup>
6		
7	Q14.	PLEASE DESCRIBE THE MAIN COMPONENTS OF THE ASTP AND THE WEST
8		BANK 230KV PROJECT.
9	A.	As described by Mr. Skok, for the Company's submission to MISO for MTEP23, the
10		components of ASTP were divided into phases, with Phases 1 and 2 consisting of the
11		improvements and new construction on the West Bank and East Bank, respectively. <sup>7</sup>
12		The West Bank 230kV Project, along with other components, is included in Phase 1 of
13		the ASTP. All components of Phase 1 and Phase 2 of the ASTP, with those included
14		in the West Bank 230kV Project identified, are as follows:
15		• ASTP Phase 1 – West Bank 230kV Project (included in this filing):
16		New Commodore 500/230kV Substation;
17		Upgrade of the Waterford 230kV Substation;
18		New Waterford – Commodore 230kV Transmission Line; and
19		Rebuild of the Iberville – Commodore 230kV Transmission Line.

<sup>&</sup>lt;sup>6</sup> Representatives of the Company met informally with representatives of the Commission Staff, including outside counsel and expert consultants, during the latter half of 2023 to apprise them of the status of various projects in MTEP23, including the ASTP; in November 2023, the Company met with these representatives of Staff and apprised them of the Company's intention to submit this series of filings for Phases 1 and 2 of the ASTP.

<sup>&</sup>lt;sup>7</sup> The ASTP also includes a Phase 3, which MISO is still evaluating. Phase 3 is not needed for service to the New 230kV Block Loads.

1		• ASTP Phase 1 – West Bank 500kV Projects (to be included in a future
2		filing):
3		<ul> <li>Waterford 500kV Substation Expansion;</li> </ul>
4		<ul> <li>Churchill 500/230kV Substation;</li> </ul>
5		➢ New 88-mile Commodore – Churchill 500kV Line; and
6		Convert the existing 230kV Waterford – Churchill Line to 500kV.
7		• ASTP Phase 2 – East Bank Projects:
8		➢ New Audubon Substation and 7.8 miles of new transmission line for the
9		purpose of serving a new industrial customer load on the East Bank,
10		which are the subject of a recent ELL filing at the Commission. <sup>8</sup>
11		➢ New 21-mile Willow Glen – Conway – Audubon 230kV line (to be
12		included in a future filing).
13		
14	Q15.	HAS THE COMPANY SUBMITTED THE WEST BANK 230KV PROJECT TO
15		MISO?
16	A.	Yes. As Mr. Skok explains in his testimony, MISO has performed an independent
17		evaluation of the assumptions and inputs modeled in the Company's studies that
18		provide the basis of the ASTP and the West Bank 230kV Project. As a result of its

<sup>&</sup>lt;sup>8</sup> See Notice of Exemption (January 31, 2024), Entergy Louisiana, LLC's Notice of Exemption Regarding the Audubon Substation and Related Transmission Facilities Consistent with Louisiana Public Service Commission General Order Dated October 10, 2013, Docket No. S-37113.

1		evaluation, MISO has approved all construction projects made part of Phase 1				
2		(including the West Bank 230kV Project) and Phase 2 of the ASTP.9				
3						
4	Q16.	WHEN DOES THE COMPANY PLAN TO ADDRESS THE REMAINDER OF THE				
5		COMPONENTS INCLUDED IN THE AMITE SOUTH TRANSMISSION				
6		PROJECT?				
7	A.	The Company will be addressing the remaining components of ASTP Phase 1 and				
8		Phase 2 in filings to be made later in 2024.				
9						
10	Q17.	WHY HAS THE COMPANY CHOSEN TO SEPARATE PHASE 1 OF THE AMITE				
11		SOUTH TRANSMISSION PROJECT INTO SEPARATE FILINGS?				
12	A.	Both of the new industrial loads that make up the New 230kV Block Loads currently				
13		take, or will take, electric service at 230kV. Further, as discussed below and by Mr.				
14		Skok, the extension of service to the two New 230kV Block Loads requires the addition				
15		of only the West Bank 230kV Project – not the entirety of ASTP Phase 1. The two				
16		New 230kV Block Loads include a load with a forecasted in-service date of				
17		, and a load with a forecasted in-service date of				
18		. As Company witness Catherine Ward explains, all components of the West Bank				
19		230kV Project are scheduled to be in service by December 31, 2026. The Company is				
20		moving forward now with the West Bank 230kV Project component of ASTP Phase 1				

<sup>&</sup>lt;sup>9</sup> See MISO MTEP23 Appendix A – New Projects recommended for approval, available at https://cdn.misoenergy.org/MTEP23%20Appendix%20A%20%20New%20Projects%20recommended%20for%20approval629964.xlsx, MISO ID 25242. As noted above, Phase 3 of the ASTP is still under consideration by MISO but is not needed for service to the New 230kV Block Loads.

1		to position itself to obtain regulatory approval of the Project in time to meet the
2		customer project in-service date needs of the New 230kV Block Loads, subject to their
3		timely execution of Electric Service Agreements ("ESAs").
4		
5	Q18.	PLEASE SUMMARIZE THE BASIS OF THE COMPANY'S CASE THAT THE
6		PROJECT IS EXEMPT FROM CERTIFICATION.
7	A.	As Mr. Jones explains, the exemption under Section VIII(6) of the Siting Order applies
8		because the Company is undertaking the West Bank 230kV Project for the primary
9		purpose of accommodating the needs of a new or expanding set of industrial loads
10		located in Louisiana (i.e., the New 230kV Block Loads).
11		As Mr. Skok explains, and as demonstrated in his Exhibit BDS-2, transmission
12		studies conducted by both ESL and MISO have confirmed that the West Bank 230kV
13		Project is necessary for ELL to accommodate the needs of the New 230kV Block
14		Loads. Those studies further confirm that the entire ASTP (including the West Bank
15		230kV Project) is necessary to accommodate electric service to the twelve industrial
16		block load additions identified in Exhibit BDS-1, including the New 230kV Block
17		Loads.
18		Additionally, as Mr. Skok also explains, and as demonstrated in his Exhibit
19		BDS-4, the Company has conducted an additional transmission study separate from the
20		study that resulted in the Company proposing the ASTP and submitting it to MISO for
21		approval. This additional study evaluated the capability of the transmission system
22		with only the New 230kV Block Loads modeled as incremental load instead of all
23		twelve (12) of the block load additions incorporated in the study resulting in the ASTP.

1		This additional study demonstrates that the West Bank 230kV Project is not only				
2		necessary but is also sufficient to accommodate electric service to the New 230kV				
3		Block Loads without the other projects and facilities included in the ASTP.				
4		As such, and as explained by Mr. Jones, the transmission facilities that comprise				
5		the West Bank 230kV Project qualify for an exemption under Section VIII(6) of the				
6		Siting Order. The West Bank 230kV Project is, accordingly, exempt from the Siting				
7		Order's requirement for certification.				
8						
9	Q19.	CAN THE ELECTRICAL NEEDS OF THE NEW 230KV BLOCK LOADS AND				
10		THE OTHER ANTICIPATED NEW LOADS IN THE AMITE SOUTH REGION BE				
11		SERVED SOLELY BY THE ADDITION OF THE AMITE SOUTH				
12		TRANSMISSION PROJECT?				
13	A.	The New 230 kV Block Loads can be served solely with the addition of the West Bank				
14		230 kV Project, but additional generation and transmission facilities will be needed to				
15		serve all of the anticipated new loads in the Amite South region. In considering this				
16		question, it is important to distinguish between the New 230kV Block Loads and other				
17		anticipated loads in the region. There is sufficient generation capacity currently				
18		available in Amite South for ELL to provide service to the New 230kV Block Loads;				
19		however, as noted earlier, the current transmission system is not capable of delivering				
20		the generation to the New 230kV Block Loads. With the construction of the West Bank				
21		230kV Project, ELL will secure the transmission capability needed to deliver existing				
22		generation to those two new loads. So, yes, the electrical needs of the New 230kV				

1	Loads can be served solely by the addition of the West Bank 230kV Project (subject to
2	the construction of customer-specific interconnection facilities).
3	The same cannot be said about the availability of sufficient generation to serve
4	the other anticipated new loads in Amite South, even with the construction of the
5	remainder of the ASTP. Additional in-region generation will be needed to reliably and
6	economically serve the forecasted new in-region loads in addition to the New 230kV
7	Block Loads. As mentioned, load growth in Amite South is resulting in - and is
8	projected to continue to result in - the construction of new and expanded industrial
9	facilities in Amite South. As discussed above, ELL has significant loads under study
10	that are anticipated to result in increased electrical demand in the future.
11	From a Company-wide perspective, as it stands today, utilizing Business Plan
12	24 ("BP24"), <sup>10</sup> the Company is forecasting a significant increase in total projected peak
13	load over the next few years. Figure 3 shows the forecasted growth in peak demand in
14	the current plan.

<sup>&</sup>lt;sup>10</sup> The Company's Business Plan is the annual refresh of the Company's forecast of expected energy volume requirements as well as the estimates of how those energy requirements would be supplied.



### 1

Figure 3

1		expected to be deactivated over the next decade. <sup>11</sup> As noted above, generating
2		resources and the transmission grid serve complementary roles: while the transmission
3		system conveys power to customers, generating resources help meet the energy and
4		capacity requirements of the grid. Said differently, generating resources generate the
5		power that the transmission system conveys to customers; transmission systems alone
6		cannot generate power or supply the various attributes that customers need to enjoy
7		reliable service. Transmission solutions alone are not viable to ensure the adequate and
8		reliable service of electricity. To that end, it is likely that ELL will require new
9		generation to serve its growing load in Amite South.
10		
11	Q21.	CAN THE COMPANY SERVE THIS LOAD GROWTH SOLELY BY ADDING
12		NEW GENERATION IN THE REGION?
13	A.	No. As previously stated, generation and transmission solutions are complementary,
14		and both must be considered and implemented in order to serve customers. The West
15		Bank 230kV Project is necessary to serve the New 230kV Block Loads. In addition, it
16		is a necessary and important step that, in conjunction with the full ASTP; and
17		generation resource additions that the Company will continue to present to the
18		Commission, will enable the Company to accommodate and serve the other significant
19		industrial load growth projected to occur in the Amite South region.
20		

<sup>&</sup>lt;sup>11</sup> See 2023 Integrated Resource Plan (Public) (May 22, 2023), 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.

# Q22. IF THE COMPANY DOES NOT CONSTRUCT THE WEST BANK 230KV PROJECT (AND COMPLETE THE REMAINING COMPONENTS OF PHASE I OF THE ASTP), WHAT ARE THE POTENTIAL CONSEQUENCES?

4 A. Failure to construct the West Bank 230kV Project and the remaining components of 5 Phase 1 of the ASTP would significantly jeopardize the ability of the Company and the 6 Commission to accommodate the economic resurgence of the Amite South region. As 7 Mr. Skok explains, all components of the ASTP, including the West Bank 230kV 8 Project, are necessary for ELL to provide electric service to the twelve (12) block load 9 additions incorporated in the studies that led to the development of the ASTP. 10 Accordingly, as Mr. May discusses, in addition to serving the two New 230kV Block 11 Loads, the West Bank 230kV Project is an essential step to facilitate a generational 12 industrial growth opportunity on the West Bank and make possible the economic and 13 reliability benefits it provides. Mr. May and I have both described the stream of 14 industrial projects seeking to expand or locate along the West Bank in Amite South. As 15 Mr. Skok explains, without the Project, the Company will not have the capability to 16 serve these new customers. Without assurances from the Commission that the Project 17 and the ASTP will be constructed to provide the infrastructure improvements necessary 18 to serve their new facilities, these customers may choose to locate their projects in other 19 states, which would forfeit a significant economic development opportunity for the 20 State and forego substantial benefits to communities on the West Bank and throughout 21 the region. The West Bank 230kV Project is the first step in the larger ASTP Phase 1 22 project that will not only allow ELL to serve these new customers but also provide 23 additional reliability by establishing a major new avenue to deliver power into the DSG

1		load pocket, which would have significant reliability benefits, including during major
2		storms like Hurricane Ida. Without the Project, these reliability benefits would be
3		delayed or lost altogether - and the DSG region would remain more exposed to adverse
4		impacts from storms or the failure or deactivation of aging generation that is essential
5		to maintaining load-serving capability in DSG and Amite South.
6		
7	Q23.	IS THE COMPANY REQUESTING EXPEDITED TREATMENT OF EITHER ITS
8		REQUEST FOR AN EXEMPTION OR ITS ALTERNATIVE REQUEST FOR
9		CERTIFICATION?
10	A.	As Mr. Jones explains, the Company is not seeking expedited consideration of this
11		Application by the Commission. The Company believes an exemption from the
12		certification requirement is warranted for the reasons explained by Mr. Jones.
13		However, in the event the Commission does not grant the Company's requested
14		exemption, then to the extent that the Company's Application is uncontested by LPSC
15		Staff or Intervenors, the Company respectfully requests that the Commission exercise
16		its authority under the Transmission Siting Order such that the Commission may
17		consider and issue a ruling on the Company's certification request within 90 days of
18		the filing of the Application. If the exemption is not granted and the Company's
19		Application is contested, then the Company respectfully requests that the Commission
20		consider and issue a ruling on the Company's certification request within 180 days of
21		the filing of the Application, but in any event, no later than the December 2024
22		Business & Executive Session. Both requested approval time frames provide for
23		adequate review by all parties under the Transmission Siting Order. The anticipated

1		in-service dates for the New 230kV Block Loads are December 31, 2026, and June 30,
2		2027. Approval of the exemption or certification request by the Commission within
3		the review period established by the Siting Order (i.e., within 180 days of filing, if the
4		Application is contested) would be sufficient to enable the Company to complete
5		construction of the Commodore Substation, the new Waterford – Commodore 230kV
6		line and other components of the Project by December 2026 (under the Project timeline
7		presented in Q31 of Ms. Ward's Direct Testimony), which would enable the Company
8		to meet the in-service dates for the New 230kV Block Loads.
9		
10		V. <u>CONCLUSION</u>
11	Q24.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
12	A.	Yes, at this time.

### 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 $13^{\frac{1}{1}}$ DAY OF MARCH 2024

) FALLAO NOTARY PUBLIC

My commission expires: Ful life

Karen H. Freese - La. Bar No. 19616 Notary Public for the State of Louisiana My Commission issued for Life



### Listing of Previous Testimony Filed by Laura K. Beauchamp

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



# **MISSISSIPPI RIVER CORRIDOR WESTBANK- JANUARY 2024 UPDATE**



### **BEFORE THE**

### LOUISIANA PUBLIC SERVICE COMMISSION

APPLICATION OF ENTERGY	)
LOUISIANA, LLC FOR EXEMPTION	)
AND/OR CERTIFICATION OF THE	)
WEST BANK 230kV TRANSMISSION	)
PROJECT IN ACCORDANCE WITH	)
LOUISIANA PUBLIC SERVICE	)
COMMISSION GENERAL ORDER	)
DATED OCTOBER 10, 2013	Ĵ
	,

DOCKET NO. U-\_\_\_\_

### DIRECT TESTIMONY

### OF

### DANIEL KLINE

### **ON BEHALF OF**

### ENTERGY LOUISIANA, LLC

**MARCH 2024** 

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### EXHIBIT LIST

Exhibit DK-1 List of Previous Testimony Filed by Daniel Kline

1		I. <u>OUALIFICATIONS</u>
2	Q1.	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
3	А.	My name is Daniel Kline. My business address is 6540 Watkins Drive, Jackson,
4		Mississippi, 39213.
5		
6	Q2.	BY WHOM ARE YOU EMPLOYED?
7	A.	I am employed by Entergy Services, LLC ("ESL"), the service company affiliate of
8		Entergy Louisiana, LLC ("ELL" or the "Company"), as Director, Power Delivery
9		Planning ("PDP"), reporting to the Vice President, Project & Portfolio Development. <sup>1</sup>
10		
11	Q3.	ON WHOSE BEHALF ARE YOU TESTIFYING?
12	A.	I am testifying before the Louisiana Public Service Commission ("LPSC" or the
13		"Commission") on behalf of ELL.
14		
15	Q4.	WHAT ARE YOUR RESPONSIBILITIES AS DIRECTOR, POWER DELIVERY
16		PLANNING?
17	A.	As Director, Power Delivery Planning, I am responsible for the leadership and
18		oversight of the PDP group, a team of engineers who study the bulk electric system <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> ESL is the service company affiliate of the Entergy Operating Companies ("EOCs") that provides engineering, planning, accounting, technical, regulatory, and other administrative support services to each of the EOCs. The EOCs include ELL; Entergy Mississippi, LLC ("EML"); Entergy Arkansas, LLC ("EAL"); Entergy New Orleans, LLC ("ENO"); and Entergy Texas, Inc. ("ETI").

<sup>&</sup>lt;sup>2</sup> "Bulk electric system" refers to "Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This does not include facilities used in the local distribution of electric energy." *NERC Bulk Electric System Definition Reference Document, August 2018, p. iii.* 

### Entergy Louisiana, LLC Direct Testimony of Daniel Kline LPSC Docket No. U-\_\_\_\_

1 and the electric distribution system to identify transmission and distribution projects 2 necessary to meet the customer load-serving needs of the EOCs, ensure the reliability 3 of service to customers, interconnect new generation, and maintain compliance with a 4 number of North American Electric Reliability Corporation ("NERC") reliability 5 standards governing transmission planning, as well as the EOCs' internal criteria for 6 transmission and distribution planning. We also maintain local planning criteria 7 specific to the EOCs' transmission and distribution assets and conduct studies to ensure 8 compliance with those criteria. We work closely with the EOCs in the development of 9 transmission and distribution projects and provide support through the regulatory 10 permitting process. In addition to planning system infrastructure, my team is also 11 responsible for engagement in the Midcontinent Independent System Operator, Inc. 12 ("MISO") stakeholder process on policy matters that affect the transmission and 13 distribution systems, participation in the MISO Transmission Expansion Plan 14 ("MTEP"), and the provision of technical support to large industrial customers.

15

### 16 Q5. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I graduated from Iowa State University with a Bachelor of Science degree in Electrical
Engineering and have over 20 years of professional experience working for and with
electric utilities, primarily in the transmission space. I started my post-graduate career
in Transmission Planning with Pacific Gas and Electric Company in 2003 before
moving into a software position in 2004 with Open Systems International, a developer
of software to monitor and control utility systems. There I focused on power system
application development and installation. In 2006, I moved back to Transmission

### Entergy Louisiana, LLC Direct Testimony of Daniel Kline LPSC Docket No. U-\_\_\_\_

1	Planning with Xcel Energy Inc. and progressed through a number of positions,
2	including roles coordinating transmission planning and policy as a liaison to MISO,
3	leading a regulatory policy team, and ultimately being responsible for all large-scale
4	transmission project development and construction across Xcel Energy Inc.'s service
5	territory for its utility operating company subsidiaries Southwestern Public Service
6	Company; Public Service Company of Colorado; Northern States Power Company, a
7	Minnesota corporation; and Northern States Power Company, a Wisconsin corporation.
8	In 2015, I began working for Black Hills Energy, a utility based in South
9	Dakota, where I was responsible for all aspects of transmission policy, planning,
10	engineering, construction, and operations. In 2020, I began working for ESL as
11	Director of Transmission Planning until the transmission and distribution organizations
12	were combined in 2022, at which time I began work in my current role.

13

14 Q6. HAVE YOU PREVIOUSLY TESTIFIED IN ANY REGULATORY PROCEEDING?

A. Yes. Exhibit DK-1 contains a list of the proceedings in which I have submittedtestimony.

1		II. <u>PURPOSE OF TESTIMONY</u>
2	Q7.	PLEASE EXPLAIN THE RELIEF SOUGHT BY THE COMPANY IN THIS
3		PROCEEDING.
4	A.	In compliance with the Siting Order,3 ELL is seeking an exemption from LPSC
5		certification with respect to the construction of the portfolio of transmission projects
6		required to add (1) a new 500/230 kV Substation ("Commodore Substation") on the
7		West Bank of the Mississippi River ("West Bank") in ELL's Amite South planning
8		region ("Amite South")4 in Iberville Parish, Louisiana and (2) approximately sixty (60)
9		miles of new 230 kV transmission line to connect the existing Waterford Substation to
10		the new Commodore Substation (the "West Bank 230 kV Project" or "Project"), on the
11		basis that the West Bank 230 kV Project is being undertaken by the Company for the
12		primary purpose of accommodating two new industrial block loads to be located on the
13		West Bank, one associated with the expansion of existing customer facilities and the
14		other associated with a new industrial plant (together, the "New 230kV Block Loads").
15		Alternatively, in the event the Commission determines that the West Bank 230
16		kV Project does not qualify for an exemption under the Siting Order, the Company
17		requests LPSC certification that the West Bank 230 kV Project serves the public
18		convenience and necessity.

<sup>&</sup>lt;sup>3</sup> See General Order (Oct. 10, 2013), In Re: Determination As To Whether the Commission Should Issue A General Order Asserting Jurisdiction Over The Certification of Utility Transmission Projects and the Determination of Whether Those Projects Are in The Public Interest ("Siting Order") at section VIII(6), Docket No. R-26018.

<sup>&</sup>lt;sup>4</sup> The Amite South planning region is generally described as the area extending east from the Baton Rouge metropolitan area to the Mississippi state line and extending south from the Amite Substation to the Gulf of Mexico. Company witness Laura K. Beauchamp provides further description and discussion of the Amite South region and the industrial load growth occurring in the region.

1		The Company's Application, including its supporting testimony and exhibits,
2		provide (1) the information required to support the application of the exemption
3		established at section VIII(6) of the Siting Order or, alternatively (2) the information
4		required pursuant to Section V of the Siting Order to show that the proposed
5		construction of the Project is in the public interest.
6		
7	Q8.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
8	A.	My Direct Testimony:
9		• provides an overview of the Entergy Transmission System and ELL's
10		Transmission System; and
11		• provides an overview of the transmission planning process employed to develop
12		transmission projects such as the West Bank 230 kV Project, including the
13		various steps in that process and the role of MISO.
14		My testimony relates closely to the Direct Testimony of Company Witness Bradley D.
15		Skok. As noted, my testimony addresses the overall planning process. Mr. Skok
16		describes the development of the Company's West Bank 230 kV Project within that
17		process and the need for the Project.
18		
19		III. OVERVIEW OF ENTERGY AND ELL TRANSMISSION SYSTEMS
20	Q9.	PLEASE PROVIDE A GENERAL DESCRIPTION OF THE ENTERGY
21		TRANSMISSION FACILITIES.
22	A.	The Entergy Transmission Facilities span portions of five states (Arkansas, Louisiana,
23		Mississippi, Texas, and Missouri) and are comprised of approximately 16,000 circuit

1		miles of transmission lines. In addition to the lines, there are more than 1,500
2		substations across the system. Employees and assets based at various locations
3		throughout the areas served by the EOCs are deployed to plan, operate, and maintain
4		these facilities.
5		
6	Q10.	WHAT GENERAL FUNCTIONS DO THE ENTERGY TRANSMISSION
7		FACILITIES SERVE?
8	A.	The Entergy Transmission Facilities are used to move high-voltage bulk electric power
9		produced by market participants within MISO across an interconnected system of
10		transmission lines and substations to distribution points for delivery to the
11		approximately 3 million retail customers of the EOCs, as well as to other transmission
12		system users such as municipalities and cooperatives, and to points of delivery into
13		other transmission systems. The Entergy Transmission Facilities also deliver power
14		directly, at transmission-level voltages, to a number of large commercial and industrial
15		retail customers of the EOCs. These transmission-level retail customers include
16		refineries, chemical plants, oil and gas processing facilities, pumping stations, and large
17		manufacturing sites vital to the economies of the Amite South region, the State of
18		Louisiana, and the nation.
19		The New 230kV Block Loads are transmission-level customers.
20		
21	Q11.	WHO OWNS THE ENTERGY TRANSMISSION FACILITIES?
22	A.	Each EOC owns or controls (subject to MISO's functional control) the transmission
23		system assets that are located in the respective area in which it provides retail electric

1		service. <sup>5</sup> In addition, ESL owns or leases certain assets that support the transmission
2		system.
3		
4	Q12.	PLEASE DESCRIBE ELL'S TRANSMISSION SYSTEM.
5	А.	The ELL transmission system is comprised of approximately 5,267 circuit miles of
6		transmission lines. The ELL transmission system is composed of 69 kV, 115 kV, 138
7		kV, 230 kV, 345 kV, and 500 kV transmission lines and substations, and it extends
8		across the footprint of the State of Louisiana. The ELL transmission system is
9		interconnected with the transmission and/or distribution systems of ENO, EAL, EML,
10		ETI, Mississippi Power, SWEPCO, Lafayette Utilities System, Cleco Power LLC
11		("Cleco"), Cleco Cajun, and Louisiana Electric Power Authority.
12		
13		IV. <u>THE TRANSMISSION PLANNING PROCESS</u>
14		A. Standards and Guidelines
15	Q13.	PLEASE PROVIDE AN OVERVIEW OF THE STANDARDS AND GUIDELINES
16		APPLICABLE TO ENTERGY'S TRANSMISSION PLANNING.
17	А.	Reliable transmission infrastructure is critical to ensure that ELL can reliably support
18		industries locating in the areas of Louisiana that the Company serves, to ensure that
19		inadequate infrastructure does not become an impediment to that development and the
20		economic benefits to Louisiana associated with that development, and to continue to
21		reliably serve all customers. To meet these goals, in addition to its own internal

<sup>&</sup>lt;sup>5</sup> EAL owns a small number of transmission assets in the State of Missouri but does not provide retail electric service in that state.

1 standards, the Entergy Transmission System is planned, designed, and operated in 2 accordance with national and regional reliability standards and guidelines. 3 In the Energy Policy Act of 2005, the United States Congress authorized the 4 Federal Energy Regulatory Commission ("FERC") to approve mandatory, enforceable 5 reliability standards for users, owners, and operators of the bulk power system. On 6 July 20, 2006, and pursuant to Section 215 of the Federal Power Act, FERC certified 7 NERC as the Electric Reliability Organization ("ERO") in the United States. To 8 achieve its mission of improving reliability and security of the bulk power system, 9 NERC continually develops and enforces reliability standards; monitors the bulk power 10 system; assesses future adequacy of the bulk power system; audits owners, operators, 11 and users of the bulk power system for preparedness; and educates and trains industry 12 personnel.

13 Included in its ERO certification is a provision for NERC to delegate authority 14 for the purpose of proposing and enforcing reliability standards in particular regions of 15 the country by entering into delegation agreements with regional entities. NERC, in 16 the exercise of its authority under this provision, delegated authority to SERC 17 Reliability Corporation ("SERC"), a nonprofit corporation, to serve as one of several 18 regional entities for the purpose of proposing and enforcing reliability standards. Under 19 that delegation, SERC is responsible for promoting and improving the reliability, 20 adequacy, and critical infrastructure of the bulk power supply systems in all or portions 21 of the 16 central and southeastern states, including Louisiana. Owners, operators, and 22 users of the bulk power system in these states cover an area of approximately 560,000 23 square miles and comprise what is known as the SERC Region.

1		B. ESL's Planning Process
2	Q14.	WHAT ARE THE OBJECTIVES OF THE TRANSMISSION PLANNING
3		PROCESS?
4	A.	Transmission planning is performed to ensure that the interconnected Entergy
5		Transmission System: (1) remains compliant with applicable NERC Reliability
6		Standards, SERC standards, and each EOC's local planning criteria; and (2) is designed
7		to deliver energy efficiently to end-use customers at the lowest reasonable cost.
8		Expansion of, and enhancements to, transmission facilities must be planned well in
9		advance of the need for such improvements given that regulatory processes, permitting
10		processes, and construction activities can take multiple years to complete.
11		
12	Q15.	HOW DOES THE COMPANY FULFILL ITS PLANNING OBLIGATIONS FOR
13		RELIABILITY PLANNING?
14	A.	As a Transmission Owner in MISO, the Company's transmission system is planned in
15		accordance with the MISO Open Access Transmission, Energy and Operating Reserve
16		Markets Tariff ("MISO Tariff"). On behalf of the Company, the PDP group oversees
17		the preparation of annual assessments of the Company's transmission facilities and
18		conducts local reliability planning through MISO's reliability planning process. To do
19		so, the PDP group applies the NERC and SERC reliability standards and local planning
20		criteria I discussed above to identify upgrades needed to maintain reliable service to
21		existing customers and accommodate future load growth. The product of this process
22		is a local reliability plan for each EOC that is approved by that EOC and provided to
23		MISO for use in its overall regional planning process.

# Q16. PLEASE EXPLAIN THE USE OF COMPUTER MODELS IN THE TRANSMISSION PLANNING PROCESS?

3 The advanced planning employed by the Company requires that computer models of A. 4 forecasted future year conditions be used to assess the performance of the transmission 5 system, taking into account planned uses of the system, generation and load forecasts, and planned transmission facilities. These models are coordinated not only among the 6 EOCs and other MISO members, but also with the remainder of the Eastern 7 8 Interconnection to ensure that the interconnected transmission facilities that are 9 ultimately constructed will operate in an efficient and reliable manner and comply with applicable regulations and standards.<sup>6</sup> ELL, and ESL planning staff, on behalf of the 10 11 Company, perform a myriad of analyses to assess the reliability and economic 12 performance of the Company's portion of the interconnected transmission system. 13 Consistent with applicable regulations and standards, these analyses are then used to 14 plan future transmission facilities that will be needed for continued reliable and 15 efficient operation, including planning to reliably meet the needs of future load growth. 16 Mr. Skok also addresses the use of computer models in the development of the 17 West Bank 230 kV Project.

<sup>&</sup>lt;sup>6</sup> The Eastern Interconnection is a large-scale power grid that permits utilities in the eastern, southern, and midwestern United States and portions of eastern Canada to operate at the same frequency. The entire SERC Region is included within this broad geographic area.

1		C. Role of MISO
2	Q17.	PLEASE DESCRIBE IN MORE DETAIL THE TRANSMISSION PLANNING
3		PROCESS UNDER THE MISO TARIFF.
4	A.	The process of planning the transmission grid in the MISO region is guided by four
5		different, but related, points of view: (1) top-down regional (or MISO-wide) planning,
6		(2) bottom-up (or locally-driven) planning, (3) access planning (which includes
7		transmission-service-request and generator interconnection-driven transmission
8		planning), and (4) state/federal policy-driven planning. The result of this process is a
9		plan for the enhancement of the transmission grid in MISO. This plan is referred to as
10		the MISO Transmission Expansion Plan ("MTEP"). The MTEP process is broadly
11		driven by multiple objectives: maintaining system reliability, meeting state and federal
12		policy objectives, lowering production cost by proposing economic transmission
13		projects, which include so-called Market Efficiency Projects ("MEPs") and Multi-
14		Value Projects ("MVPs"), and addressing generation interconnection requests and
15		transmission service requests.
16		To accomplish these goals, the MTEP process includes opportunities for input

16 To accomplish these goals, the MTEP process includes opportunities for input 17 from various stakeholders and participants, including meetings and the submission of 18 written comments. For instance, economic projects are generally developed through 19 the top-down portion of the MTEP, which utilizes MISO's economic assessment of the 20 transmission system and stakeholder input – including the opportunity to submit 21 candidate projects for consideration – to identify potential congestion on the system 22 and develop cost-effective solutions to that congestion, if possible. Local reliability-23 driven projects are generally developed in the bottom-up process, which relies on the

1		identification of need by the local Transmission Owners and analyzes that need (and
2		the proposed solution) with significant stakeholder review and input. Transmission
3		access planning is driven by customers requesting generator interconnection and
4		transmission service.
5		No matter how a project is developed, the MTEP process relies on MISO's
6		broad analysis of the MISO transmission system (and its neighboring systems),
7		stakeholder review of and input on that analysis and proposed projects, and, ultimately,
8		a decision from the MISO Board of Directors (the "MISO Board") regarding approval
9		of any projects recommended to it.
10		
11	Q18.	PLEASE ELABORATE ON THE BOTTOM-UP PROCESS.
12	A.	Each MISO MTEP planning cycle is an 18-month process that begins in June of each
13		year and concludes in December of the following year. For example, MTEP23 began
14		its process in June 2022 with a requirement that Transmission Owners submit their
15		proposed MTEP23 projects to address reliability no later than mid-September 2022.
16		With respect to reliability planning, projects generally are proposed to MISO by a
17		Transmission Owner. Based on its significant knowledge of and experience planning
18		for its transmission system, a MISO Transmission Owner's proposal identifies
19		reliability deficiencies on the transmission system ( <i>i.e.</i> , instances in which a project is
20		needed to address a violation of an applicable NERC standard, local planning criterion,
21		or other reliability requirement) and recommends projects needed to address the
22		violation. MISO selects the preferred method to mitigate any reliability deficiencies
23		that have been identified in the proposals. MISO's study of the proposed projects is

1 part of its annual MTEP process I outlined above, which includes review of the projects 2 with stakeholders at scheduled sub-regional planning meetings throughout the year in 3 order to share information about the needs and drivers of the proposed projects and 4 obtain robust stakeholder input on the proposed projects. If appropriate, MISO also 5 optimizes the plans submitted by different stakeholders, selecting alternative projects 6 that may address identified needs more efficiently than those proposed by individual 7 stakeholders. At the conclusion of the MTEP planning cycle, the MISO Board 8 considers for approval the projects recommended by the MISO planning staff that are 9 determined to effectively and efficiently meet reliability needs. 10 The Company's West Bank 230 kV Project was developed by ESL through the 11 bottom-up process described above, proposed to MISO, and approved, through the 12 MTEP23 process.<sup>7</sup> As noted by Company witness Ms. Laura Beauchamp and Mr. 13 Skok, the Project is one component of a larger project that MISO approved as the 14 "Amite South Reliability Project – Phase 1" in MTEP23. The Company will address 15 the balance of the components of the Phase 1 Project as well as certain other projects 16 that were approved in MTEP23 and that are necessary to serve the projected load 17 growth in the Amite South region in filings that are expected to be made later, as 18 appropriate, in 2024.

<sup>&</sup>lt;sup>7</sup> See MISO MTEP23 Appendix A – New Projects recommended for approval, at <u>https://cdn.misoenergy.org/MTEP23%20Appendix%20A%20-%20New%20Projects%20recommended%20for</u> <u>%20approval629964.xlsx</u>, MISO Project 25242. As noted below, "Amite South Reliability Project - Phase 1" is the name of the Company's submission to MISO that included the West Bank 230 kV Project as a component part.

# Q19. DOES MISO HAVE A ROLE OTHER THAN THE ADMINISTRATION OF THE MTEP PROCESS?

A. Yes, MISO also plays a key role in overseeing the reliability plans of all of its members,
including the Company, to ensure that reliability is maintained and to ensure that plans
are coordinated and optimized. MISO applies the same NERC standards and the same
local planning criteria as the Company, while the Company continues to be responsible
for compliance with reliability standards. If projects meet defined criteria under the
MISO Tariff, they are included in the MTEP and recommended to the MISO Board for
approval.

10

11 Q20. DOES THE COMPANY PROVIDE TESTIMONY ADDRESSING, 12 SPECIFICALLY, THE DEVELOPMENT OF THE WEST BANK 230 kV PROJECT? 13 A. Yes. Mr. Skok describes the need for the West Bank 230 kV Project and its 14 development within the process I have described. 15

- 16 V. <u>CONCLUSION</u>
- 17 Q21. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 18 A. Yes, at this time.

### AFFIDAVIT

### STATE OF MISSISSIPPI

### **COUNTY OF HINDS**

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

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

Daniel Kline

11-4-25

### SWORN TO AND SUBSCRIBED BEFORE ME THIS $\underline{\ell + \underline{l}}$ DAY OF MARCH 2024

My commission expires: \_\_\_\_

Madison Count My Commission Expire November 4, 2025 SION NUMBE 111111

### LIST OF PREVIOUS TESTIMONY FILED BY DANIEL KLINE

### **Before the Public Utility Commission of Texas**

**Docket No. 52487,** *Application of Entergy Texas, Inc. to Amend Its Certificate of Convenience and Necessity to Construct Orange County Advanced Power Station (2021).* 

### Before the Louisiana Public Service Commission

**Docket No. U-35927,** 1803 Electric Cooperative, Inc., Ex Parte. In Re: Application for Approval of Power Purchase Agreements and for Cost Recovery (2021).

**Docket No. U-36190,** *Application of Entergy Louisiana, LLC, for Approval of the 2021 Solar Portfolio, the Geaux Green Option, Cost Recovery and Related Relief* (2021).

**Docket No. U-36135,** *Jefferson Davis Electric Cooperative, Inc. and Nextera Energy Marketing, LLC, Ex Parte. In Re: Joint Application for Approval of Power Supply Agreement (2022).* 

**Docket No. U-36133,** *Dixie Electric Membership Corporation, Nextera Energy Marketing, LLC and Amite Solar, LLC, Ex Parte. In re: Joint Application for Approval of Power Supply Agreements (2022).* 

**Docket No. U-36514,** *Concordia Electric Cooperative, Inc., Nextera Energy Marketing, LLC, and Mondu Solar, LLC, Ex Parte. In Re: Joint Application for Approval of Long-Term Power Supply Agreements (2023).* 

**Docket No. U-36515,** Pointe Coupee Electric Membership Corporation, Nextera Energy Marketing, LLC, and Mondu Solar, LLC, Ex Parte. In re: Joint Application for Approval of Long-Term Power Supply Agreements (2023).

**Docket No. U-36516,** Southwest Louisiana Electric Membership Corporation, Nextera Energy Marketing, LLC, and Beauregard Solar, LLC, Ex Parte. In re: Joint Application for Approval of Long-Term Power Supply Agreements (2023).

### Before the Wyoming Public Service Commission

**Docket No. 20003-180-EN-19 (Record No. 15205),** *In the Matter of the Application of Cheyenne Light, Fuel and Power Company d/b/a Black Hills Energy for a Certificate of Public Convenience and Necessity to Construct and Operate a 115 kV Switching Substation and Associated Transmission Lines, and Related Facilities in Laramie County, Wyoming* (2019). **Docket No. 20003-173-ET-18 (Record No. 15104),** In the Matter of Cheyenne Light, Fuel and Power d/b/a Black Hills Energy for Authority to Implement a Blockchain Interruptible Service Tariff (2018).

### Before the South Dakota Public Utilities Commission

**Docket No. EL 19-006,** In the Matter of the Application of Black Hills Power Inc. dba Black Hills Energy for a Facility Permit to Construct a 230 kV Transmission Line and Associated Facilities in Pennington County (2019).

### Before the Colorado Public Utilities Commission

**Proceeding No. 16AL-0326E,** In the Matter of Advice Letter No. 721 Filed by Black Hills/Colorado Electric Utility Company, LP to Increase Its Base Rates For All Rate Schedules, Implement a General Rate Schedule Adjustment, Revise Its Transmission Cost Adjustment Tariff, and Implement Other Proposed Changes to Its Colorado PUC No. 9-Electric Tariff To Be Effective June 5, 2016 (2016).

**Proceeding No. 14A-0287E,** In the Matter of the Application of Public Service Company of Colorado (A) For a Certificate of Public Convenience and Necessity for the Pawnee to Daniels Park 345 kV Transmission Project, and (B) For Specific Findings with Respect to EMF and Noise (2014).

**Proceeding No. 19A-0055E,** In the Matter of the Verified Application of Black Hills Colorado Electric, LLC for Expedited Approval of a Service Agreement Pursuant to Its Economic Development Rate Tariff (2019).

### **Before the Minnesota Public Utilities Commission**

**Docket No. E002/GR-13-868,** In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota (2013). **Docket No. E002/CN-06-1115,** In the Matter of the Application of Great River Energy, Northern States Power Company (d/b/a Xcel Energy) and Others for Certificates of Need for Three 345-kV Transmission Lines with Associated Systems Connections (2008).

### Before the Public Service Commission of Wisconsin

**Docket No. 4220-CE-172,** Application of Northern States Power Company-Wisconsin to Construct and Operate a 69 kV Transmission Line and Substations to be Built in the Towns of Stanton and Star Prairie, St. Croix County, Wisconsin (2009).

### **Before the Federal Energy Regulatory Commission**

**Docket No. EL12-28-000,** *Complaint and Request for Fast Track Processing of Xcel Energy Services Inc. and Northern States Power Company, a Wisconsin Corporation* (2012) (affidavit).
# LOUISIANA PUBLIC SERVICE COMMISSION

APPLICATION OF ENTERGY	)
LOUISIANA, LLC FOR EXEMPTION	)
AND/OR CERTIFICATION OF THE	)
WEST BANK 230kV TRANSMISSION	)
PROJECT IN ACCORDANCE WITH	)
LOUISIANA PUBLIC SERVICE	)
COMMISSION GENERAL ORDER	)
DATED OCTOBER 10, 2013	)
,	

DOCKET NO. U-\_\_\_\_

# DIRECT TESTIMONY

#### OF

# **BRADLEY D. SKOK**

#### **ON BEHALF OF**

## ENTERGY LOUISIANA, LLC

PUBLIC REDACTED VERSION

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V.	CONCLUSION	17

# EXHIBIT LIST

Exhibit BDS-1 (HSPM)	Block Load Additions (Amite South Study)
Exhibit BDS-2 (HSPM)	Loading Comparisons (Amite South Study)
Exhibit BDS-3 (HSPM)	Aerial Map Amite South – Existing and New Facilities
Exhibit BDS-4 (HSPM)	Loading Comparisons (New 230kV Block Loads Only)

1		I. QUALIFICATIONS
2	Q1.	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
3	A.	My name is Bradley D. Skok. My business address is 6540 Watkins Drive, Jackson,
4		Mississippi, 39213.
5		
6	Q2.	BY WHOM ARE YOU EMPLOYED?
7	A.	I am employed by Entergy Services, LLC ("ESL"), the service company affiliate of
8		Entergy Louisiana, LLC ("ELL" or the "Company"), as Manager, Transmission
9		Planning, within the Power Delivery Planning ("PDP") group of the Entergy Power
10		Delivery Organization ("EPDO"). <sup>1</sup>
11		
12	Q3.	ON WHOSE BEHALF ARE YOU TESTIFYING?
13	A.	I am testifying before the Louisiana Public Service Commission ("LPSC" or the
14		"Commission") on behalf of ELL.
15		
16	Q4.	WHAT ARE YOUR RESPONSIBILITIES AS MANAGER, TRANSMISSION
17		PLANNING?
18	A.	As Manager, Transmission Planning within the PDP group, I am part of a team of
19		engineers, reporting to the Director, Power Delivery Planning, who study the bulk
20		electric system and identify transmission projects necessary to meet the customer

<sup>&</sup>lt;sup>1</sup> ESL is the service company affiliate of the Entergy Operating Companies ("EOCs") that provides engineering, planning, accounting, technical, regulatory, and other administrative support services to each of the EOCs. The EOCs include ELL; Entergy Mississippi, LLC ("EML"); Entergy Arkansas, LLC ("EAL"); Entergy New Orleans, LLC ("ENO"); and Entergy Texas, Inc. ("ETI").

1 service needs of the EOCs, ensure the reliability of service to customers, interconnect 2 new generation, and maintain compliance with a number of North American Electric 3 Reliability Corporation ("NERC") reliability standards governing transmission 4 planning. We also maintain local planning criteria specific to the EOCs' transmission 5 assets and conduct studies to ensure compliance with those criteria. My responsibilities 6 include performing technical analyses such as power system reliability assessments, 7 power system stability analyses, and transmission system assessments for the EOCs, 8 with whom I work closely in the development of transmission projects and provide 9 support through the regulatory permitting process. 10 11 Q5. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE. 12 A. I received a Bachelor of Science degree in Electrical Engineering in December of 2006 13 from Mississippi State University in Starkville, Mississippi. After receiving my 14 bachelor's degree, I worked for ESL from 2006 until 2012 as a transmission operations 15 engineer. From 2012 to 2015, I worked for EML as a transmission line construction 16 engineer. In 2015, I enrolled as an Engineer Intern (EI26278) with the Mississippi 17 Board of Licensure for Professional Engineers & Surveyors. From 2015 to 2017, I 18 returned to ESL as a transmission planning engineer. From 2017 to 2020, I worked for 19 ESL as a senior project manager in the portfolio management group. In 2020, I started 20 in my current role as the transmission planning manager for Louisiana and Texas, 21 where I am currently responsible for the long-term transmission planning activities for 22 ELL as well as ETI and ENO.

1		I have previously provided testimony to this Commission in the form of an
2		affidavit in support of ELL's notice filing in LPSC Docket S-37113 <sup>2</sup> ; I have also
3		provided Direct Testimony on behalf of ETI before the Public Utility Commission of
4		Texas ("PUCT") in Docket No. 46248. <sup>3</sup>
5		
6		II. PURPOSE OF TESTIMONY
7	Q6.	PLEASE EXPLAIN THE RELIEF SOUGHT BY THE COMPANY IN THIS
8		PROCEEDING.
9	A.	In compliance with the Siting Order, <sup>4</sup> ELL is seeking an exemption from LPSC
10		certification with respect to the construction of the portfolio of transmission projects
11		required to add (1) a new 500/230kV Substation ("Commodore Substation") on the
12		West Bank of the Mississippi River ("West Bank") in ELL's Amite South Planning
13		Region ("Amite South") <sup>5</sup> in Iberville Parish, Louisiana and (2) approximately sixty
14		(60) miles of new 230kV transmission line to connect the existing Waterford Substation
15		to the new Commodore Substation (the "West Bank 230kV Project" or "Project"), on

<sup>&</sup>lt;sup>2</sup> See Notice of Exemption (Jan. 31, 2024), Entergy Louisiana, LLC's Notice of Exemption Regarding the Audubon Substation and Related Transmission Facilities Consistent with Louisiana Public Service Commission General Order Dated October 10, 2013, Docket No. S-37113.

<sup>&</sup>lt;sup>3</sup> See Application of Entergy Texas, Inc. to Amend its Certificate of Convenience and Necessity for a 230kV Transmission Line in Jefferson, Chambers and Liberty Counties, PUCT Docket No. 46248 (January 17, 2017) (Statement of Bradley Skok).

<sup>&</sup>lt;sup>4</sup> See General Order (Oct. 10, 2013), In Re: Determination As To Whether the Commission Should Issue A General Order Asserting Jurisdiction Over The Certification of Utility Transmission Projects and the Determination of Whether Those Projects Are in The Public Interest ("Siting Order") at section VIII(6), Docket No. R-26018.

<sup>&</sup>lt;sup>5</sup> The Amite South planning region is generally described as the area extending east from the Baton Rouge metropolitan area to the Mississippi state line and extending south from the Amite Substation to the Gulf of Mexico. Company witness Laura K. Beauchamp provides further description and discussion of the Amite South region and the industrial load growth occurring in the region.

1		the basis that the West Bank 230kV Project is being undertaken by the Company for
2		the primary purpose of accommodating electric service to two new industrial block
3		loads to be located on the West Bank, one associated with the expansion of existing
4		customer facilities and the other associated with a new industrial plant (together, the
5		"New 230kV Block Loads").
6		Alternatively, in the event the Commission determines that the West Bank
7		230kV Project or any part of the Project does not qualify for an exemption under the
8		Siting Order, the Company requests LPSC certification that the West Bank 230kV
9		Project serves the public convenience and necessity.
10		The Company's Application, including its supporting testimony and exhibits,
11		provide (1) the information required to support the application of the exemption
12		established at Section VIII(6) of the Siting Order or, alternatively (2) the information
13		required pursuant to Section V of the Siting Order to show that the proposed
14		construction of the Project is in the public interest.
15		
16	Q7.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
17	A.	My Direct Testimony:
18		• explains the development of the West Bank 230kV Project as part of a larger
19		portfolio of transmission projects that will provide needed capability to
20		accommodate new industrial load in Amite South;
21		• explains the determination of the need for the West Bank 230kV Project and
22		the studies conducted by both ESL and the Midcontinent Independent System
23		Operator, Inc. ("MISO") that led to the development of the Project as the most

1		effective portfolio of projects necessary to reliably provide electric service to
2		the New 230kV Block Loads; and
3		• provides the detailed technical information required to show that the primary
4		purpose of the West Bank 230kV Project is to accommodate the needs of the
5		New 230kV Block Loads.
6		My testimony relates closely to the Direct Testimony of Company Witness Daniel
7		Kline, which provides an overview of the transmission planning process. As noted, my
8		testimony describes the development of the West Bank 230kV Project within that
9		process.
10		
11		III. THE DEVELOPMENT OF THE WEST BANK 230kV PROJECT
12	Q8.	WHAT WERE YOUR RESPONSIBILITIES WITH RESPECT TO THE
13		DEVELOPMENT OF THE WEST BANK 230kV PROJECT?
14	A.	I have led the team responsible for:
15		• conducting the applicable transmission studies with respect to block load
16		additions in the Company's Amite South planning region, which additions
17		included the New 230kV Block Loads;
18		• evaluating the results of such studies, including the identification of overload,
19		low voltage, or other violations of applicable standards and criteria on
20		Company's transmission facilities; and
21		• the development of the West Bank 230kV Project as part of a larger
22		transmission portfolio that resolves the violations identified, and demonstrating
23		that the Project is necessary to provide reliable electric service to the New

- 1
   230kV Block Loads as well as to the other block loads incorporated in the

   2
   studies.
- 3

# 4 Q9. IS THERE A MAJOR FACTOR UNDERLYING THE NEED FOR AND THE 5 DEVELOPMENT OF THE WEST BANK 230kV PROJECT?

Yes. As described by Company witnesses Phillip R. May and Laura K. Beauchamp in 6 A. 7 their Direct Testimonies, economic growth is occurring at an unprecedented rate in 8 Amite South. Block load additions currently under contract will fully consume the 9 currently available load-serving capability in the West Bank industrial corridor 10 traversed by the Project. Absent steps to address the need for increased transmission 11 capability, ELL will not be capable of serving additional large customer load blocks in 12 this industrial corridor. Further, Amite South has roughly 5,000 MW of load additions 13 on the West Bank under study by ESL for service commencing during the period 14 between 2023 and 2030. Reliable transmission infrastructure is critical to the region to 15 ensure ELL can reliably continue to meet the energy needs of the industries locating 16 there, to ensure that inadequate infrastructure does not become an impediment to that 17 development, and to continue to reliably serve all customers in southeast Louisiana.

Based largely on the load growth discussed, which I further describe below, transmission studies by both ESL, on behalf of ELL, and MISO have led to the determination that additional and substantial transmission infrastructure is necessary to accommodate electric service to the forecasted block load additions in Amite South over the next ten years. As further described below, these studies resulted in the development of a portfolio of transmission projects, referred to as the "Amite South

1		Transmission Project" (or "ASTP") to accommodate industrial load growth in Amite
2		South. The West Bank 230kV Project is part of the ASTP and is necessary to
3		accommodate service to the New 230kV Block Loads, which require electric service
4		from the Company during the early part of that period, prior to the in-service dates
5		associated with other parts of the West Bank portion of the ASTP.
6		
7	Q10.	PLEASE DESCRIBE THE DEVELOPMENT OF THE ASTP AND THE WEST
8		BANK 230kV PROJECT.
9	А.	Currently, the transmission system in the Amite South region in the industrial corridor
10		between Baton Rouge and New Orleans is highly constrained, meaning that the
11		Company is unable to serve incremental load in some locations without the Company
12		providing increased load-serving capability through additional facilities or upgrades to
13		the transmission system, and this includes the region along the West Bank where the
14		New 230kV Block Loads are locating. As mentioned above, there will be no additional
15		load-serving capability in Amite South after ELL begins service to customers for which
16		ELL has an executed Electric Service Agreement. While there have been no violations
17		of NERC Reliability Standards identified along the area's transmission system under
18		current system conditions, any additional load on the system will likely create a
19		violation. Additionally, the transmission system in this area is also a critical path for
20		importing power into Amite South. The possible acceleration of generator
21		deactivations in the Amite South region due to environmental rule changes would
22		further constrain the transmission system in this corridor, as it would necessarily
23		increase the power imports through that path.

#### Entergy Louisiana, LLC Direct Testimony of Bradley D. Skok LPSC Docket No. U-\_\_\_\_

1 As part of the process employed in the transmission planning process, the PDP 2 group regularly meets with other departments responsible for forecasting load growth, including the forecasting of block load additions associated with new industrial load. 3 4 As addressed by Mr. Kline, the evaluation of the capability of the transmission system 5 to reliably serve these additions employs computer modeling that evaluates the 6 performance of the transmission system incorporating the additional load as the major change in the model. If overload, low voltage, or other NERC or SERC violations are 7 8 identified, then PDP develops corrective action(s), consisting of enhancements to 9 existing transmission facilities or the construction of new facilities, to resolve the 10 violations, the efficacy of which is then evaluated through subsequent studies.

11 During the transmission planning process associated with the development of the 2023 MISO Transmission Expansion Plan ("MTEP23"),<sup>6</sup> the PDP group modeled 12 13 twelve (12) industrial block load additions totaling 2,190 MW of increased load in 14 Amite South, including the New 230kV Block Loads. An initial study based on the 15 current configuration of the system with the twelve block load additions incorporated 16 as the major change in the model indicated that numerous transmission facilities would 17 overload and low voltages would occur as a result of various transmission contingency 18 events. Based on the Company's evaluation of the overload/low-voltage conditions 19 identified, the PDP group developed corrective action to resolve the violations 20 consisting of substantial transmission infrastructure improvements and new 21 construction on the East and West Bank in Amite South. The infrastructure

ELL witness Mr. Kline describes the MTEP process in his Direct Testimony.

1		improvements and new construction, described below, constitute the ASTP and include
2		the components of the West Bank 230kV Project. A subsequent study incorporating
3		the twelve block load additions (of 2,190 MW) and the ASTP verified the necessity of
4		all components of the ASTP, including the West Bank 230kV Project components, to
5		resolve the violations identified and allow ELL to provide electric service to the
6		developing load in Amite South.
7		
8	Q11.	PLEASE DESCRIBE THE MAIN COMPONENTS OF THE ASTP AND THE WEST
9		BANK 230kV PROJECT.
10	A.	For the Company's submission to MISO during the MTEP23 process, the components
11		of ASTP were divided into phases, with Phases 1 and 2 consisting of improvements
12		and new construction on the West Bank and East Bank, respectively. <sup>7</sup> The West Bank
13		230kV Project, along with other components, is included in Phase 1 of the ASTP. All
14		components of Phase 1 and Phase 2 of the ASTP, with those included in the West Bank
15		230kV Project identified, are:
16		• ASTP Phase 1 – West Bank 230kV Project (included in this filing):
17		New Commodore 500/230kV Substation;
18		<ul> <li>Upgrade of the Waterford 230kV Substation;</li> </ul>
19		New Waterford – Commodore 230kV Transmission Line; and
20		Rebuild of the Iberville – Commodore 230kV Transmission Line.
21		• ASTP Phase 1 – Remaining Projects (to be included in a future filing):

<sup>&</sup>lt;sup>7</sup> The ASTP also includes a Phase 3, which was submitted into MTEP23 but which MISO is still evaluating. Phase 3 is not needed for service to the New 230kV Block Loads.

1		<ul> <li>Waterford 500kV Substation Expansion;</li> </ul>
2		<ul> <li>Churchill 500/230kV Substation;</li> </ul>
3		▶ New 88-mile Commodore – Churchill 500kV Line; and
4		Convert the existing 230kV Waterford – Churchill Line to 500kV.
5		• ASTP Phase 2 – East Bank Projects :
6		> New Audubon Substation and 7.8 miles of new transmission line for the
7		purpose of serving a new industrial customer load on the East Bank,
8		which are the subject of a recent ELL filing at the Commission. <sup>8</sup>
9		➢ New 21-mile Willow Glen − Conway − Audubon 230kV line (to be
10		included in a future filing).
11		Company witness Catherine Ward provides a detailed description of all components of
12		the West Bank 230kV Project, which components are necessary for reliable service to
13		the New 230kV Block Loads.
14		
15	Q12.	HAVE YOU PROVIDED EXHIBITS REFLECTING THE STUDIES RELIED ON
16		IN DEVELOPING THE ASTP AND THE WEST BANK 230kV PROJECT AND
17		DETERMINING THE LOCATIONS OF THE NEW FACILITIES THAT MAKE UP
18		THE PROJECTS?
19	A.	Yes. First, Exhibit BDS-1 lists the twelve new block load additions that constitute the
20		2,190 MW of increased load modeled in the Amite South studies discussed above,

<sup>&</sup>lt;sup>8</sup> See Notice of Exemption (Jan. 31, 2024), Entergy Louisiana, LLC's Notice of Exemption Regarding the Audubon Substation and Related Transmission Facilities Consistent with Louisiana Public Service Commission General Order Dated October 10, 2013, Docket No. S-37113.

### Entergy Louisiana, LLC Direct Testimony of Bradley D. Skok LPSC Docket No. U-\_\_\_\_

1		including the New 230kV Block Loads. Additionally, the results of the studies
2		conducted in the development of the ASTP are reflected in Exhibit BDS-2, which
3		shows (1) the estimated transmission element overload and/or low-voltage condition in
4		the initial study when the 2,190 MW is added to the existing load in Amite South
5		without any additional infrastructure modeled; and (2) the results of the subsequent
6		study when the additional load and the components of the ASTP are included in the
7		model. As the studies demonstrate, and as reflected in Exhibit BDS-2, the ASTP is
8		necessary to resolve the violations identified in the initial study and for ELL to provide
9		electric service to the twelve (12) block load additions incorporated in the studies. The
10		studies also demonstrate the necessity of the West Bank 230kV Project, as part of the
11		ASTP, to provide reliable service to the New 230kV Block Loads as well as to the
12		remaining block loads included in the additional 2,190 MW modeled in the studies.
13		I have also provided Exhibit BDS-3, which shows the Company's existing
14		transmission facilities in Amite South and the new facilities to be added by the ASTP
15		and the West Bank 230kV Project.
16		
17	Q13.	YOU HAVE STATED THAT THE ASTP, INCLUDING THE WEST BANK 230kV
18		PROJECT, WAS SUBMITTED TO MISO IN THE MTEP23 PROCESS. WHAT
19		HAS BEEN MISO'S RESPONSE?
20	А.	MISO has performed an independent evaluation of the assumptions and inputs modeled
21		in the Company's studies that provide the basis of the ASTP and the West Bank 230kV
22		Project. As a result of its evaluation, MISO has approved all construction projects

1		recommended by the Company as part of Phase 1 (including the West Bank 230kV
2		Project) and Phase 2 of the ASTP. <sup>9</sup>
3		
4	Q14.	IS THE COMPANY, IN THIS FILING, REQUESTING CERTIFICATION AND
5		APPROVAL OF ALL PROJECTS IN PHASES 1 AND 2 OF THE ASTP?
6	A.	No. As Ms. Beauchamp explains, in this Application, the Company is invoking an
7		exemption or, alternatively, seeking a CCN only with respect to the West Bank 230kV
8		Project as necessary to serve the New 230kV Block Loads. I have discussed the
9		Company's development of the broader ASTP to present the full context of the ASTP
10		and because the underlying block load increases (2,190 MW) on which the
11		development of the ASTP is based include the New 230kV Block Loads. Based on the
12		studies that resulted in the ASTP, the West Bank 230kV Project is part of the
13		construction necessary to serve the underlying block load increases.
14		As discussed by Ms. Beauchamp, ELL is submitting a series of filings to the
15		LPSC, including this filing, regarding the various components of the ASTP based upon
16		the timing by which those components will be needed to accommodate service to the
17		new loads that are being developed. The components of the West Bank 230kV Project
18		are needed more immediately than the remainder of ASTP Phase 1 to enable the
19		Company to accommodate the in-service dates of the New 230kV Block Loads. The

<sup>&</sup>lt;sup>9</sup> See MISO MTEP23 Appendix A – New Projects recommended for approval, at <u>https://cdn.misoenergy.org/MTEP23%20Appendix%20A%20-%20New%20Projects%20recommended%20for</u> <u>%20approval629964.xlsx</u>, MISO ID 25242. As noted above, Phase 3 of the ASTP was also submitted in MTEP23; that project is still under consideration by MISO, but is not needed for service to the New 230kV Block Loads.

1		Company is or will be addressing the construction of the other components included in
2		Phases 1 and 2 of the ASTP – other than the West Bank 230kV Project – in previous
3		and future filings, as appropriate.
4		
5	Q15.	HAS THE COMPANY CONDUCTED ANY OTHER STUDIES TO CONFIRM THE
6		NEED FOR THE WEST BANK 230kV PROJECT TO ACCOMMODATE SERVICE
7		TO THE NEW 230kV BLOCK LOADS?
8	A.	Yes. The Company has conducted transmission studies separate from the studies that
9		resulted in the development of the ASTP, to confirm the need for the West Bank 230kV
10		Project for ELL to provide service to the New 230kV Block Loads. The additional
11		studies evaluated the capability of the transmission system with only the two New
12		230kV Block Loads of and and modeled as incremental loads instead of
13		all twelve of the block load additions being incorporated in the study as was the case
14		in the study that resulted in the development of the ASTP. The results of the additional
15		studies are shown in Exhibit BDS-4 and further demonstrate that the West Bank 230kV
16		Project is necessary to accommodate electric service to the New 230kV Block Loads.
17		
18	Q16.	YOU STATE THAT THE WEST BANK 230kV PROJECT IS NECESSARY FOR
19		ELL TO PROVIDE RELIABLE ELECTRIC SERVICE TO THE NEW 230kV

20

13

BLOCK LOADS. ARE OTHER TRANSMISSION SYSTEM UPGRADES,

1		BEYOND CUSTOMER INTERCONNECTION FACILITIES, REQUIRED TO
2		PROVIDE SERVICE TO THE NEW 230kV BLOCK LOADS?
3	A.	No. The West Bank 230kV Project provides all transmission components necessary
4		and sufficient to accommodate service to the New 230kV Block Loads. <sup>10</sup> As designed,
5		the additional studies discussed above would have identified, but did not in fact
6		identify, the need for any corrective action on the Entergy transmission system, other
7		than the components of the West Bank 230kV Project, to provide service to the New
8		230kV Block Loads.
9		
10	IV	MISO CLASSIFICATION OF THE PROJECT AND COST ALLOCATION
11	Q17.	HOW IS THE WEST BANK 230kV PROJECT CLASSIFIED UNDER THE MISO
12		TARIFF?
13	A.	The Project is classified by MISO as an "Other" project. An Other project is defined
14		in the MISO Transmission Planning Business Practices Manual (BPM-20) as a project
15		that addresses local reliability issues on the MISO transmission system other than
16		violations of NERC or regional reliability criteria. As defined in BPM-20:
17 18 19 20 21 22		Other projects represent local transmission projects that address localized Transmission Issues other than the reliability issues addressed by Baseline Reliability Projects, and thus other projects are not projects used to address projected violations of NERC and regional reliability standards. Other projects may include projects to satisfy Transmission Owner and/or state and local planning criteria other than NERC or regional reliability standards, interconnect new
23 24 25		Loads, relocate transmission facilities, address aging transmission infrastructure, replace problematic transmission plant, improve

<sup>&</sup>lt;sup>10</sup> As indicated, Exhibit BDS-2 demonstrates the necessity of the ASTP to serve all block loads modeled in the underlying study and listed in Exhibit BDS-1; however, additional transmission infrastructure components may be required to serve the other block loads modeled in the study, beyond the New 230kV Block Loads.

22

1 operational performance or address other operational issues, address 2 service reliability issues with end-use consumers, improve 3 aesthetics including but not limited to undergrounding overhead 4 transmission facilities, address localized economic issues, and 5 address other miscellaneous localized needs. 6 7 Although, as I noted above, the planning analysis for this Project shows it to be needed 8 in order to ensure compliance with NERC reliability standards, it is not classified as a 9 Baseline Reliability Project ("BRP") – which is the MISO project type ordinarily 10 associated with such projects – because of timing issues regarding the load additions at 11 issue. Specifically, due to MISO's planning/modeling criteria, the New 230kV Block 12 Loads were not included in MISO's base case planning models. Thus, the violations 13 that would have been triggered by the addition of the New 230kV Block Loads (and 14 that would be mitigated by the West Bank 230kV Project) were not identified as NERC 15 criteria violations during the MTEP23 planning process, and thus the West Bank 230kV 16 Project did not qualify as a BRP in MTEP23. In other words, if the load associated 17 with the New 230kV Block Loads were added to the system without the West Bank 18 230kV Project, it would be expected that the Project would be classified as a BRP in the next MTEP after such addition.<sup>11</sup> 19 20 The West Bank 230kV Project does not qualify as either a Market Efficiency 21 Project ("MEP") or a Multi-Value Project ("MVP"), which are the two primary types

of economic projects allowed under the MISO Tariff, because the driver of the Project

<sup>&</sup>lt;sup>11</sup> As demonstrated by the transmission studies discussed in my testimony, were the Company to have moved forward with service to the New 230kV Block Loads without the West Bank 230kV Project in place, it would have resulted in a substantial risk of potential load shed or loss of power events. Alternatively, it is reasonable to consider that the prospect of such a risk could have resulted in the customers developing the New 230kV Block Loads seeking to construct those new industrial facilities at another location with another supplier, possibly outside of Louisiana.

Public Redacted Version

1 is not that it will provide economic benefit in excess of its cost, and, in fact, it does not 2 provide such net benefits in an amount sufficient to qualify as an MEP or MVP. 3 4 BASED ON ITS CLASSIFICATION AS AN "OTHER" PROJECT, HOW WILL THE 018. 5 COSTS OF THE WEST BANK 230kV PROJECT BE ALLOCATED UNDER THE MISO TARIFF? 6 7 A. Although the West Bank 230kV Project does not qualify as a BRP because of the timing 8 issue noted above, this does not have a material effect on the manner in which the costs 9 of the Project are allocated under the MISO Tariff. As an Other type project that has 10 not been qualified as either a MEP or MVP, the Project will have its cost assigned to 11 the local Transmission Pricing Zone ("TPZ") in which the Project is constructed (i.e., 12 the ELL TPZ), just as if it were classified as a BRP. All customers of the transmission 13 system that receive transmission service in that TPZ will be allocated a portion of the 14 cost of the Project on the basis of their load ratio share within the TPZ, per Attachment 15 O of the MISO Tariff. Based on the most recent Attachment O filing in June 2023, 16 ELL would be responsible for approximately 78% of the costs of the Project, while 17 other transmission customers who receive transmission service in the ELL TPZ would 18 be responsible for approximately 22% of the costs. These figures are estimates; the 19 actual allocation of costs would be determined based on future circumstances regarding 20 the amount and type of transmission service that ELL and other transmission customers 21 actually obtain when the West Bank 230kV Project is placed in service. 22

# 1 V. CONCLUSION

# 2 Q19. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

3 A. Yes.

#### AFFIDAVIT

14L

#### **STATE OF MISSISSIPPI**

#### **COUNTY OF HINDS**

NOW BEFORE ME, the undersigned authority, personally came and appeared, Bradley D. Skok, who after being duly sworn by me, did depose and say:

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

Bradley D. Shok Bradley D. Skok

SWORN TO AND SUBSCRIBED BEFORE ME THIS <u>*L*</u> DAY OF MARCH 2024



# LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY
LOUISIANA, LLC FOR EXEMPTION
AND/OR CERTIFICATION OF THE
WEST BANK 230kV TRANSMISSION
PROJECT IN ACCORDANCE WITH
LOUISIANA PUBLIC SERVICE
COMMISSION GENERAL ORDER
DATED OCTOBER 10, 2013
,

DOCKET NO. U-\_\_\_\_

#### EXHIBIT BDS-1

# HIGHLY SENSITIVE PROTECTED MATERIAL

# **INTENTIONALLY OMITTED**

# LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY
LOUISIANA, LLC FOR EXEMPTION
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COMMISSION GENERAL ORDER
DATED OCTOBER 10, 2013

DOCKET NO. U-\_\_\_\_

#### EXHIBIT BDS-2

# HIGHLY SENSITIVE PROTECTED MATERIAL

# **INTENTIONALLY OMITTED**

# LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY
LOUISIANA, LLC FOR EXEMPTION
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COMMISSION GENERAL ORDER
DATED OCTOBER 10, 2013
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DOCKET NO. U-\_\_\_\_

#### EXHIBIT BDS-3

# HIGHLY SENSITIVE PROTECTED MATERIAL

# **INTENTIONALLY OMITTED**

# LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY
LOUISIANA, LLC FOR EXEMPTION
AND/OR CERTIFICATION OF THE
WEST BANK 230kV TRANSMISSION
PROJECT IN ACCORDANCE WITH
LOUISIANA PUBLIC SERVICE
COMMISSION GENERAL ORDER
DATED OCTOBER 10, 2013

DOCKET NO. U-\_\_\_\_

#### EXHIBIT BDS-4

# HIGHLY SENSITIVE PROTECTED MATERIAL

# **INTENTIONALLY OMITTED**

# LOUISIANA PUBLIC SERVICE COMMISSION

APPLICATION OF ENTERGY	)
LOUISIANA, LLC FOR EXEMPTION	)
AND/OR CERTIFICATION OF THE	)
WEST BANK 230kV TRANSMISSION	)
PROJECT IN ACCORDANCE WITH	)
LOUISIANA PUBLIC SERVICE	)
COMMISSION GENERAL ORDER	Ĵ
DATED OCTOBER 10, 2013	Ś
	,

DOCKET NO. U-\_\_\_\_

# DIRECT TESTIMONY

#### OF

## **CATHERINE WARD**

#### **ON BEHALF OF**

## ENTERGY LOUISIANA, LLC

PUBLIC REDACTED VERSION

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## EXHIBIT LIST

Exhibit CRW-1 ( <b>HSPM</b> )	Map Detailing the Routing and Location of the Project Facilities
Exhibit CRW-2	Scoping Diagram of the Project Components
Exhibit CRW-3	Standard Typical Pole Sections for Transmission Line Construction
Exhibit CRW-4	Commodore Substation One-Line Diagrams
Exhibit CRW-5	Illustration of Right-of-Way Widths for Waterford – Commodore 230kV and 500kV Transmission Lines
Exhibit CRW-6 (HSPM)	Project Cost Estimate by Component
Exhibit CRW-7 (HSPM)	Project Cost Estimate by Category

1		I. BACKGROUND INFORMATION
2	Q1.	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
3	A.	My name is Catherine Ward. I am employed by Entergy Louisiana, LLC ("ELL" or
4		the "Company") as Director, Project Management - Capital Projects in the Project
5		Delivery – Capital Projects ("PDCP") group. My business address is 9585 Pecue Lane,
6		Baton Rouge, Louisiana 70810.
7		
8	Q2.	ON WHOSE BEHALF ARE YOU TESTIFYING?
9	A.	I am testifying before the Louisiana Public Service Commission (the "LPSC" or the
10		"Commission") on behalf of ELL.
11		
12	Q3.	PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL, PROFESSIONAL, AND
13		BUSINESS EXPERIENCE.
14	A.	I graduated from Louisiana State University ("LSU") in 1999 with a degree in Civil
15		Engineering. I later received a Master of Business Administration degree from LSU in
16		2003. I began my career at Entergy Gulf States, Inc. as a Transmission Line
17		Construction Engineer and Transmission Line Maintenance Engineer from 2000-2005.
18		From 2006-2010, I served as Transmission Project Manager for Entergy Services, LLC
19		("ESL") <sup>1</sup> , managing transmission line and substation projects. From January 2010 to
20		February 2013, I served as Substation Operations Manager for the Louisiana grid,

<sup>&</sup>lt;sup>1</sup> Entergy Services, LLC is the service company affiliate of the Entergy Operating Companies ("EOCs") that provides engineering, planning, accounting, technical, regulatory, and other administrative support services to each of the EOCs. The EOCs include ELL, Entergy Arkansas, LLC ("EAL"); Entergy Mississippi, LLC ("EML"); Entergy New Orleans, LLC ("ENO"); and Entergy Texas, Inc. ("ETI").

1 directing the planning and scheduling of substation and transmission line maintenance 2 and planned capital projects. From February 2013 to January 2014, I served as the 3 Regional Customer Service Manager for ELL. Then, from June 2014 to November 4 2020, I served as Senior Manager, Project Management for Capital Projects-5 Transmission in the PDCP group, in which role I directly managed projects ranging in cost from \$20-135 million and a team of five internal project management personnel. 6 7 Since November 2020, I have served in my current role as Director, Project 8 Management - Capital Projects in the PDCP group, where I am responsible for 9 managing the work of a group of employees whose job is to safely execute a portfolio 10 of projects in locations across the areas served by the Entergy Operating Companies 11 ("EOCs") in Arkansas, Texas, Mississippi, and Louisiana. My current team includes 12 21 internal Project Managers and multiple contract project management resources 13 responsible for developing a variety of projects, including greenfield and brownfield 14 projects, substations, transmission line projects (69kV to 500kV), and distribution line 15 projects (13.2kV-34.5kV).

16

#### 17 Q4. PLEASE DESCRIBE THE FUNCTIONS OF THE PDCP GROUP.

A. The PDCP group is responsible for the Project Delivery System that is used for the
 development and execution of the largest, most complex capital projects undertaken on
 behalf of the EOCs. The Project Delivery System exists to ensure that capital projects
 are consistently and effectively developed, implemented, and managed on behalf of the
 EOCs. It provides the framework for project planning and execution to achieve high
 quality outcomes such as safely and efficiently delivering projects within budget and

1 schedule with clear lines of accountability for project delivery and application of strong 2 project management fundamentals and tools. The PDCP group has responsibility for 3 both oversight and execution of certain capital projects. Project oversight involves the 4 systematic evaluation of the completeness and quality of each project's business case, 5 project management, and technical deliverables as the project progresses through the stage gate process. Assurance is performed through rigorous stage gate reviews, 6 7 independent project assessments, and reporting to ensure that projects are not only 8 compliant with the Project Delivery Standard, but that the project is well positioned to 9 be successfully delivered. 10 Lastly, from an execution perspective, the PDCP group is responsible for new 11 generation project development and execution; large, new transmission project 12 development and execution; and large capital-intensive transmission projects that may 13 be implemented at Fossil power plants. Project execution refers to the performance of 14 business, project management, project control, and technical activities in accordance 15 with stage gate process requirements with the objective of achieving project goals 16 safely, on-schedule, within budget, and with the most effective use of capital.

17

1	Q5.	HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY TO THE COMMISSION?
2	A.	I recently submitted an affidavit to the Commission in Docket No. S-37113 concerning
3		the Company's construction of the Audubon Substation and related transmission
4		facilities. <sup>2</sup>
5		
6		II. PURPOSE OF TESTIMONY
7	Q6.	PLEASE DESCRIBE GENERALLY THE RELIEF SOUGHT BY THE COMPANY
8		IN THIS PROCEEDING.
9	A.	In compliance with the Commission's Transmission Siting Order, <sup>3</sup> ELL is seeking an
10		exemption from LPSC certification with respect to the construction of the portfolio of
11		transmission projects required to add (1) a new 500/230kV Substation ("Commodore
12		Substation") on the West Bank of the Mississippi River ("West Bank") in ELL's Amite
13		South Planning Region ("Amite South") <sup>4</sup> in Iberville Parish, Louisiana and (2)
14		approximately 60 miles of new 230kV transmission line to connect the existing
15		Waterford Substation to the new Commodore Substation (the "West Bank 230kV
16		Project" or the "Project"), on the basis that the Project is being undertaken by the
17		Company for the primary purpose of accommodating electric service to two new

<sup>&</sup>lt;sup>2</sup> See Notice of Exemption (January 31, 2024), Entergy Louisiana, LLC's Notice of Exemption Regarding the Audubon Substation and Related Transmission Facilities Consistent with Louisiana Public Service Commission General Order Dated October 10, 2013, Docket No. S-37113.

<sup>&</sup>lt;sup>3</sup> See General Order (October 10, 2013), In re: Determination as to Whether the Commission Should Issue a General Order Asserting Jurisdiction Over the Certification of Utility Transmission Projects and the Determination of Whether Those Projects Are in the Public Interest ("Transmission Siting Order"), Docket No. R-26018, Id. at Section VIII(6).

<sup>&</sup>lt;sup>4</sup> The Amite South planning region is generally described as the area from east of the Baton Rouge metropolitan area to the Mississippi state line and south from the Amite Substation to the Gulf of Mexico.

1		industrial block loads to be located on the West Bank, one associated with the
2		expansion of existing customer facilities and the other associated with a new industrial
3		plant (together, the "New 230kV Block Loads").
4		Alternatively, in the event the Commission determines that the West Bank
5		230kV Project or any part of the Project does not qualify for an exemption under the
6		Transmission Siting Order, the Company requests LPSC certification that the Project
7		serves the public convenience and necessity.
8		The Company's Application, including its supporting testimony and exhibits,
9		provides (1) the information required to support the application of the exemption
10		established at Section VIII(6) of the Transmission Siting Order or, alternatively (2) the
11		information required pursuant to Section V of the Transmission Siting Order to show
12		that the proposed construction of the Project is in the public interest.
13		
14	Q7.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?
15	A.	In support of the Company's Application, I describe the different components of the
16		Company's proposed construction of the Project. In particular, my Direct Testimony
17		provides a general summary description and illustrations of the proposed Transmission
18		Facilities, <sup>5</sup> as well as the designs, proposed locations, siting, right-of-way plans,
19		construction timelines, and estimated costs of the Project components.

<sup>&</sup>lt;sup>5</sup> The Siting Order defines Transmission Facilities as "a system of structures, wires, insulators and associated hardware, but not including switching or substations, that carry electric energy over distances and that are located in whole or in part with the State of Louisiana and furnish electric service within the state, that would be constructed and operated at or above a nominal 100 kilovolt ("kV"), exceeds one mile in length, and the estimated cost to construct exceeds \$20 million." *See* Transmission Siting Order, *Id.* at 9-10.

1		
2		III. THE WEST BANK 230kV PROJECT
3	Q8.	WHAT IS YOUR INVOLVEMENT WITH THE WEST BANK 230kV PROJECT?
4	A.	As Director of Project Management - Capital Projects, I am responsible for the
5		oversight of the design, engineering, procurement, construction, commissioning, and
6		turnover to operations of the Project. Through my team, I have worked with ESL
7		Power Delivery Planning to define the scope and design of the Project components in
8		order to manage the project schedule, cost, quality, and performance. Accordingly, my
9		involvement with the Project will be to manage the design and construction of its
10		components, consistent with the approvals requested in the Company's Application and
11		good utility practice.
12		
13	Q9.	WHY IS THE WEST BANK 230kV PROJECT NECESSARY?
14	A.	As discussed by Company witnesses Phillip May, Laura Beauchamp, and Bradley
15		Skok, economic development activities in the Amite South area have led to the
16		determination that infrastructure expansion and reliability improvements are necessary
17		to serve the forecasted load growth in the Amite South area.
18		
19	Q10.	PLEASE DESCRIBE THE COMPONENTS THAT COMPRISE THE WEST BANK
20		230kV PROJECT.
21	A.	In general, the West Bank 230kV Project consists of the construction of facilities
22		necessary to bring a new 230kV transmission source to the West Bank of the
23		Mississippi River into the Down Stream of Gypsy ("DSG") load pocket in order to

1 improve reliability and load-serving capability, which includes the following 2 components:<sup>6</sup> 3 **Commodore 500/230kV Substation** 4 Build a new 500/230kV substation with the 230kV configured in a breaker and a half scheme with nine 230kV circuit breakers. 5 6 7 • 500kV to be configured in a four-breaker ring including a 500/230kV 8 autotransformer bank including one spare phase. 9 10 • New property acquisition is required in Iberville Parish, including an 11 estimated 46 acres of land for substation and line cut-ins. 12 13 The substation will cut-in to the following existing transmission lines: • 14 Richardson-Wise 230kV line, Iberville-Derrick 230kV line, and Bayou 15 LaButte - Webre 500kV line. 16 17 Remote end relay and settings upgrades required at the following substations: Derrick 230kV, Iberville 230kV, Webre 500 kV, and Bayou 18 19 LaButte 500kV. Settings-only upgrades required at the following 20 substations: Richardson 230 kV and Wise 230kV. 21 22 Waterford 230kV Substation Upgrade 23 Upgrade relay panels and settings at the existing substation. At this point we do not anticipate that an expansion of the substation is 24 25 necessary. 26 27 No property acquisition required; work to be constructed on Company-28 owned property. 29 30 Waterford – Commodore 230kV Transmission Line Build a new 60-mile 230kV Line from Waterford 230kV Substation to 31 32 Commodore 500/230kV Substation. 33

<sup>&</sup>lt;sup>6</sup> As explained by Ms. Beauchamp and Mr. Skok in their Direct Testimony, the instant Application concerns the 230kV elements of Phase 1 of the Amite South Transmission Project ("ASTP"), located on the West Bank of the Mississippi River, which was approved by MISO in MTEP23. Later this year, the Company will file a separate certification application regarding the 500kV portion of the ASTP Phase 1 (West Bank) project.

1 2		<ul> <li>Right of Way ("ROW") Acquisition for Waterford – Commodore 230kV and 500kV Transmission Lines</li> </ul>
3 4 5 6 7 8 9 10 11 12 13 14		<ul> <li>Acquire approximately 60 miles of new ROW for the 230kV line between the Commodore and Waterford Substations and the first 60 miles of 500kV line ROW from Commodore Substation that runs parallel to the new 230kV ROW. The new 500/230kV ROW to be acquired includes an estimated 2,023 acres between Commodore and Waterford Substations.</li> <li>Continue 500kV ROW acquisition to Churchill Substation for an estimated length of 28 miles.</li> <li>Iberville – Commodore 230kV Line Rebuild</li> </ul>
15		<ul> <li>Rebuild approximately 3.6 miles of line to &gt; 1900A.</li> </ul>
16 17		Distribution Lines
18 19 20 21 22 23 24 25 26 27 28		<ul> <li>Distribution lines located in the Project location are under evaluation to determine if they meet required clearances with the installation of the new facilities.</li> <li>The distribution scope includes routing temporary construction power (approximately 0.7 mile) to the Commodore Substation from an existing nearby distribution line and to provide a 300kVA transformer for permanent power to the substation. Construction will be predominantly overhead to the west of Commodore Substation and will transition to underground as the line approaches the substation.</li> </ul>
29	Q11.	IN HER DIRECT TESTIMONY (Q14), MS. BEAUCHAMP DESCRIBES PHASES
30		1 AND 2 OF THE AMITE SOUTH TRANSMISSION PROJECT. SHE NOTES
31		THAT THE WEST BANK 230kV PROJECT (WHICH IS THE SUBJECT OF THIS
32		APPLICATION) IS PART OF PHASE 1 OF THE ASTP, AND SHE INDICATES
33		THAT THE COMPANY WILL SUBMIT TO THE COMMISSION ANOTHER
34		CERTIFICATION APPLICATION TO ADDRESS THE REMAINDER OF PHASE
35		1, WHICH WILL INCLUDE THE 500kV COMPONENTS OF THE ASTP ON THE

WEST BANK. PLEASE EXPLAIN HOW AND WHY THE COMPANY IS
 COORDINATING THE 230kV AND 500 kV COMPONENTS OF PHASE 1 OF THE
 ASTP.

4 A. The 230kV and 500kV components of the Amite South Transmission Project ("ASTP") 5 are both required to achieve the broader planning objectives described in the Direct 6 Testimonies of Company witness Daniel Kline, and Mr. Skok. However, there are 7 benefits of completing the 230kV work in advance of the 500kV work – principally, 8 the ability to serve the New 230kV Block Loads. It is currently anticipated that the 9 construction of both lines will commence in July 2025 (although work on the 10 Commodore Substation will start earlier, in February 2025). As noted below in Section 11 VI, the planned in-service date for the 230kV line is December 2026, which will enable 12 ELL to accommodate the in-service dates for the New 230kV Block Loads, which as 13 described by Ms. Beauchamp, will commence as early as December 31, 2026. The 14 planned in-service date of the 500kV line will be approximately 15 months later 15 because construction of the line will continue all the way to Churchill Substation 16 (whereas the 230kV line will terminate at Waterford Substation).

17 The Company plans to develop and construct the two projects (the 230kV and 18 500kV lines) in a carefully coordinated fashion to leverage the efficiencies and 19 customer savings that can be achieved from that approach. I explain below (Q30) how 20 and why ELL is undertaking ROW acquisition for the 500kV line in conjunction with 21 ROW acquisition for the 230kV line. As the construction execution plans are further 22 developed for both the 230kV line and the 500kV line, the project teams will identify 23 opportunities to perform construction activities concurrently to achieve efficiencies in

#### Entergy Louisiana, LLC Direct Testimony of Catherine Ward LPSC Docket No. U-\_\_\_\_

1 the use of labor and equipment resources required and reduce the amount of time that 2 landowners are impacted by the project construction effort. These opportunities will 3 also shorten the duration of the administrative efforts to manage these construction 4 projects, which in turn will reduce project costs. In addition, reducing the amount of 5 time that these labor and equipment resources are on the project sites will help to lessen 6 the environmental impact caused by, and cost to recover and/or repair the land affected by, installed transportation mats and the frequent traversing of heavy equipment over 7 8 the land. The results of combining the construction activities will allow for an overall 9 reduction in project costs, with resulting savings to customers, and ultimately reduce 10 the impact and inconvenience of construction activities to landowners and communities 11 along the route. The efficiencies arising from undertaking the construction of the 12 230kV and 500kV assets in parallel are captured in the Project cost estimate in Section 13 VII below.

The Company will discuss these issues in more detail in its future Application regarding the 500kV line, including the many interrelated activities on the two projects that will be executed in a coordinated fashion, the customer savings that can be achieved, and the resulting need for a decision from the LPSC on the 500kV project to accommodate the planned in-service date of March 2028 for the 500kV line.
1		IV. PROJECT LOCATION AND CONSTRUCTION
2		A. Exhibits Illustrating Project Location and Construction
3	Q12.	PLEASE DESCRIBE GENERALLY THE LOCATION AND SITING OF THE
4		COMPONENTS OF THE WEST BANK 230kV PROJECT.
5	A.	As a preliminary note, the location and siting I provide is based on the best information
6		that the Company has at this time given the early stages of project development. To
7		illustrate the location and construction of the components of the Project, my Direct
8		Testimony includes the following exhibits:
9		• Exhibit CRW-1 (HSPM): This is a generalized substation-to-substation
10		routing of the new and modified substations and transmission lines in the
11		Project. The general locations of the new and/or modified substations and
12		transmission lines associated with the Project are in St. Charles Parish, St. John
13		the Baptist Parish, St. James Parish, Assumption Parish, Ascension Parish,
14		Iberville Parish, and Jefferson Parish. Exhibit CRW-1, which contains highly
15		sensitive protected materials ("HSPM"), includes illustrations of the routing of
16		both the components of the West Bank 230kV Project included in this
17		Application as well as the additional components of the West Bank 500kV
18		transmission line that will be part of Phase 1 of the ASTP to be included in a
19		subsequent filing (which is described in the Direct Testimonies of Ms.
20		Beauchamp and Mr. Skok).

21

•

**Exhibit CRW-2:** This is a scoping diagram of the Project components.

11

1		• <b>Exhibit CRW-3</b> : This includes illustrations of the standard typical pole
2		sections that will be used for the construction of the new and rebuilt
3		transmission line sections.
4		• <b>Exhibit CRW-4:</b> This includes diagrams of the new Commodore Substation,
5		including both the 230kV and 500kV elements.
6		
7		B. Commodore 500/230kV Substation
8	Q13.	ELL PLANS TO CONSTRUCT A NEW SUBSTATION AS PART OF THE
9		PROJECT, THE COMMODORE 500/230kV SUBSTATION. WHAT
10		CONSTRUCTION ACTIVITIES ARE CONTEMPLATED FOR THAT
11		SUBSTATION?
12	A.	The preliminary design calls for the construction of a new 500/230kV substation called
13		Commodore Substation. The 500kV yard is to be configured in a 4-breaker ring,
14		including four 500kV circuit breakers plus a 500/230kV autotransformer bank
15		consisting of three single-phase units plus one spare. The 230kV portion of the yard
16		will be configured in a breaker and a half scheme with nine 230kV circuit breakers.
17		The site will be cleared, sub-surface drainage will be installed, and a fence will
18		be installed. In addition, concrete foundations will be installed for various equipment,
19		and steel will be erected to support necessary switches, bus-work, and other equipment.
20		A control house containing necessary relaying and communications equipment will be
21		constructed.
22		

# Q14. PLEASE DESCRIBE THE LOCATION AND SITING OF THE COMMODORE 500/230kV SUBSTATION.

A. The new Commodore Substation is planned to be located on property located near the
existing Richardson – Wise 230kV line, the existing Iberville – Derrick 230kV line,
and the existing Bayou LaButte – Webre 500kV lines, on property located in Iberville
Parish. The Company plans to acquire approximately 46 acres of property on which to
construct the substation and related facilities.

8

9 Q15. YOU NOTED ABOVE THAT THE CONSTRUCTION OF THE COMMODORE
10 500/230kV SUBSTATION WILL INCLUDE SEVERAL CUT-INS TO EXISTING
11 TRANSMISSION LINES. PLEASE EXPLAIN WHAT THOSE ENTAIL.

The Commodore cut-in project will involve the cut-in of three (3) existing transmission 12 A. 13 lines, the reconductor of one (1) existing line, and the re-configuration of one (1) 14 existing line. The three (3) existing lines that will be cut-in are the Richardson – Wise 15 230kV line, the Iberville – Derrick 230kV line, and the Bayou LaButte – Webre 500kV 16 line. These cut-ins will require approximately one (1) mile each of new greenfield 17 alignment for the cut-ins and the removal of approximately one-half (1/2) mile of 18 existing line each. In addition to the Iberville – Derrick cut-in scope, the existing circuit 19 will also require a reconductor of approximately three (3) miles of the existing line 20 from the Commodore Substation cut-in to the existing Iberville Substation. Lastly, the 21 existing Donaldsonville – Evergreen 230kV line will be re-configured with two (2) new 22 structures and the removal of one (1) existing structure to allow for the cut-in scopes.

23

1	Q16.	PLEASE DESCRIBE ANY PERMITTING THAT WILL BE REQUIRED FOR THE
2		CONSTRUCTION OF THE COMMODORE SUBSTATION.
3	A.	The construction of the Commodore Substation will require a Storm Water Pollution
4		Prevention Permit ("SWPPP") from the Louisiana Department of Environmental
5		Quality ("LDEQ") in addition to a Nationwide 57 permit from the Army Corps of
6		Engineers ("USACE").
7		
8	Q17.	WHAT ARE THE PROJECTED COSTS TO CONSTRUCT THE COMMODORE
9		500/230kV SUBSTATION?
10	A.	As summarized in Section VII below and HSPM Exhibits CRW-6 and CRW-7, the
11		projected costs to construct the Commodore 500/230kV Substation are as follows:
12		• Acquisition of Land: \$ ;
13		• Construction of Substation: \$ ;
14		• Cut-ins for Existing Transmission Lines: \$ total; <sup>7</sup> and
15		• Remote End and Relay and Settings Upgrades: \$
16		

- Richardson-Wise 230kV Line: \$
- Iberville-Derrick 230kV Line: \$ ; and
- Bayou LaButte Weber 500kV Line: \$

<sup>&</sup>lt;sup>7</sup> This total includes the costs of the following cut-ins:

1		C. Waterford 230kV Substation Upgrade
2	Q18.	WHAT CONSTRUCTION ACTIVITIES ARE CONTEMPLATED FOR THE
3		EXISTING WATERFORD 230kV SUBSTATION?
4	A.	The preliminary design calls for the termination of the new Commodore 230kV line at
5		the existing Waterford 230kV Substation. The new Commodore 230kV line will be
6		located at the node of the Waterford 1 generator, which has been retired from service.
7		This work will require new relay panels and settings at the Waterford 230kV
8		Substation. At this time, it is not expected that the 230kV substation will need to be
9		expanded. As summarized in Section VII below and HSPM Exhibits CRW-6 and
10		CRW-7, the estimated cost to complete this component of the Project is less than \$
11		. 8
12		
13		D. Waterford – Commodore 230kV Transmission Line Construction
14	Q19.	WHAT ACTIVITIES AND STRUCTURES ARE CONTEMPLATED FOR THE
15		CONSTRUCTION OF THE NEW WATERFORD-COMMODORE 230kV LINE?
16	A.	The preliminary design calls for the construction of 230kV monopole structures with
17		vibratory caisson foundations. Typical structure height is approximately 100 feet. The
18		230 kV transmission line will travel approximately 60 miles south and east from the
19		new Commodore Substation to the existing Waterford 230kV Substation. Construction
20		activities will include ROW and vegetation clearing, installation of structure

<sup>&</sup>lt;sup>8</sup> The funding approved for this portion of the Project was based upon an expansion of the Waterford 230kV Substation and therefore likely exceeds the amount that will be necessary to complete the upgrade described above.

1		foundations (which will be a combination of base-plated vibratory steel caissons and
2		driven steel pile foundations supporting a pile cap), erection of galvanized steel
3		structures with braced post insulators, and installation of conductors and shield
4		wire/optical ground wire ("OPGW"). The structures are illustrated in Exhibit CRW-3.
5		It is anticipated that helicopters will be used in aid of construction to minimize the cost
6		of construction, including more efficient construction durations in addition to reduced
7		matting costs.
8		
9	Q20.	PLEASE DESCRIBE THE LOCATION AND SITING OF THE NEW WATERFORD
10		– COMMODORE 230kV LINE.
11	А.	The new Waterford-Commodore 230kV line will be located along a route that traverses
12		St. Charles Parish, St. John the Baptist Parish, St. James Parish, Assumption Parish,
13		Ascension Parish, and Iberville Parish. The new Waterford – Commodore 230kV line
14		will run between the new Commodore Substation in Iberville, Louisiana, and the
15		existing Waterford 230kV Substation located in Killona, Louisiana. As illustrated in
16		Exhibit CRW-1 (HSPM), the line will run 59 miles and will remain on the West Bank
17		of the Mississippi River (that is, the line does not cross the river).
18		
19	Q21.	PLEASE DESCRIBE ANY PERMITTING THAT WILL BE REQUIRED FOR THE
20		CONSTRUCTION OF THE WATERFORD – COMMODORE 230kV
21		TRANSMISSION LINE.
22	A.	The construction of the line will require the following permits:
23		a. USACE Individual permit requiring wetlands mitigation.

1		b. Louisiana Coastal Zone Coastal Use Permit from the Louisiana Department of
2		Natural Resources.
3		c. Louisiana Department of Transportation and Development ("LA DOTD")
4		permits to cross all state highways.
5		d. SWPPP from LDEQ
6		e. Letters of No Objection ("LONO") to be obtained from pipeline owners for all
7		pipeline crossings.
8		f. Permit requirements due to proximity to existing airport facilities for the
9		Federal Aviation Administration and proximity to existing FM radio
10		transmitters and microwave towers for the Federal Communications
11		Commission are under review.
12		
13	Q22.	WHAT ARE THE PROJECTED COSTS TO CONSTRUCT THE WATERFORD –
14		COMMODORE 230kV TRANSMISSION LINE?
15	A.	As summarized in Section VII below and HSPM Exhibits CRW-6 and CRW-7, the
16		projected costs to construct the Waterford – Commodore 230kV line are as follows:
17		• Construction of 230kV Line: \$ ; and
18		• ROW Acquisition for 230/500kV Lines: \$ .9
19		

<sup>&</sup>lt;sup>9</sup> As noted in Q30 below and Exhibit CRW-6 (HSPM), this amount also includes the cost of ROW acquisition for the Waterford – Commodore 500kV transmission line, which will be the subject of a subsequent application to be filed by the Company at the LPSC.

1		E. Iberville – Commodore 230kV Transmission Line Rebuild
2	Q23.	WHAT CONSTRUCTION ACTIVITIES ARE CONTEMPLATED AS PART OF
3		THE REBUILD OF THE IBERVILLE – COMMODORE 230kV LINE?
4	А.	The preliminary design entails upgrading approximately 3.6 miles of existing
5		transmission conductor from the existing Iberville 230kV Substation to the new
6		Commodore 500/230kV Substation to achieve a minimum 2000 amp rating.
7		Construction activities will include some vegetation clearing, installation of new 1272
8		aluminum conductor composite reinforced ("ACCR") conductor and insulators, and
9		removal of existing underrated conductor and insulators.
10		
11	Q24.	CAN YOU DESCRIBE THE STRUCTURES THAT WILL BE USED ON THE
12		REBUILD OF THE IBERVILLE – COMMODORE 230kV LINE?
13	A.	At this time, it is expected that there will not be any new structures installed for the
14		Iberville - Commodore 230kV line rebuild. However, if required, any transmission
15		structures that would be installed would be galvanized steel poles secured to either
16		drilled concrete piers or base-plated caisson foundations. The structures are illustrated
17		in Exhibit CRW-3.
18		
19	Q25.	PLEASE DESCRIBE ANY PERMITTING THAT WILL BE REQUIRED FOR THE
20		REBUILD OF THE IBERVILLE – COMMODORE 230kV LINE.
21	A.	For the rebuild of the line, the Company will be required to obtain LONOs from the
22		owners of existing pipelines within the ROW that the rebuilt line will cross. The
23		Company will also need to obtain permission from the LA DOTD to cross all state

1		highways. Additionally, there is one railroad crossing that will require a permit. It is
2		not anticipated that environmental permitting will be required at this time.
3		
4	Q26.	WHAT ARE THE PROJECTED COSTS FOR THE REBUILD OF THE IBERVILLE
5		- COMMODORE 230kV TRANSMISSION LINE?
6	A.	As summarized in Section VII below and HSPM Exhibits CRW-6 and CRW-7, the
7		projected cost for the rebuild of the Iberville – Commodore 230kV line is \$
8		
9		V. RIGHTS-OF-WAY FOR THE PROJECT
10	Q27.	WILL THE COMPANY USE ANY EXISTING ROW FOR PORTIONS OF THE
11		WEST BANK 230kV PROJECT?
12	А.	Yes. The Company anticipates using existing ROW or paralleling existing ROW where
13		possible. In particular, the Company anticipates that portions of the new Waterford –
14		Commodore 230kV line will be constructed within ELL-owned property near
15		Waterford Substation in St. Charles Parish. Portions of the new 230kV line will run
16		parallel to existing transmission lines where feasible, including the existing Waterford
17		- Vacherie 230kV line, the Sidney - Vacherie 230kV line, the Donaldsonville -
18		Evergreen 230kV line, the St. James – Welcome 230kV line, and the Sidney – St. James
19		230kV line.
20		

1

2		FOR THE WEST BANK 230kV PROJECT.
3	A.	As noted above, the Company will acquire approximately 60 miles of new ROW for
4		the Waterford – Commodore 230kV line. The width of ROW acquired will account
5		for the new 230kV and 500kV lines running parallel from Commodore Substation to a
6		tie point near Waterford Substation for a distance of approximately 60 miles. The ROW
7		width in this segment will be optimized to minimize new ROW required and will range
8		from 212-275 feet wide.
9		The Company will also acquire an additional 28 miles of ROW in St. Charles
10		and Jefferson Parishes for the Commodore – Churchill 500kV line (which will be the
11		subject of a future certification filing at the Commission). The ROW from the tie point
12		near Waterford Substation to Churchill Substation for the 500kV line will range from
13		180-225 feet wide.
14		
15	Q29.	HAS THE COMPANY BEGUN THE ROW ACQUISITION PROCESS FOR THE
16		WATERFORD – COMMODORE 230kV LINE?
17	A.	The Company has conducted preliminary front-end loading for the entire Waterford –
18		Commodore 230kV transmission line route, and it has started discussions with certain
19		landowners along the potential routes for the new transmission line. Initial discussions
20		include permissions for access, survey, and soil borings. The Company has also started
21		to issue offers for ROW acquisition along the route. The Company has also been
22		negotiating with landowners for the properties needed to build Commodore Substation.
23		
		20

Q28. PLEASE DESCRIBE THE ADDITIONAL ROW THAT MUST BE ACQUIRED

# Q30. YOU NOTED ABOVE THAT THE ROW ACQUIRED FOR THE WATERFORD – COMMODORE 230kV LINE WILL ALSO BE USED FOR THE COMMODORE – CHURCHILL 500kV LINE. PLEASE EXPLAIN.

4 A. As noted above (Q11), the Company is working to acquire the ROW for the 230kV and 5 500kV lines concurrently in order to gain efficiencies and minimize the adverse effect 6 to landowners. This includes ROW for both the 60-mile parallel path of the two lines 7 from Commodore Substation to Waterford Substation and the remaining 28-miles of 8 500kV line to Churchill Substation. It is more efficient and thus more beneficial to 9 customers to acquire ROW for the two lines at the same time rather than conducting 10 that process twice. That includes both ROW acquisitions that are achieved on a 11 negotiated basis with the landowner and acquisitions that are achieved through the 12 expropriation process in the courts (which is not uncommon for ROW acquisitions in 13 the Amite South area given that many tracts of land present absentee ownership issues).

14 Combining the paths of the lines also reduces the width of ROW that must be 15 acquired between Commodore Substation and Waterford Substation. The ROW width 16 required to accommodate both lines together is narrower than would be required if the 17 ROW width were measured separately for the two lines. As demonstrated in Exhibit 18 CRW-5, the ROW width required for the combined lines is 275 feet (page 3); whereas, 19 if the ROW were determined separately for the two lines, a combined width of 350 feet 20 would be required (pages 1-2). In acquiring the ROW, it is more efficient to acquire 21 the full ROW width (*i.e.*, 275 feet) rather than doing so in separate transactions. That 22 approach reduces the transaction costs, negotiation efforts, and time for the acquisition 23 processes required to obtain the needed ROW for the combined lines.

#### 1 VI. PROJECT TIMELINE

#### 2 Q31. WHAT IS THE ESTIMATED TIMELINE FOR COMPLETION OF THE PROJECT?

3 A. The Project timeline is currently projected to be as follows in Table 1, subject to

Table 1

4 change:

# 5

6

Event	Start Date	Completion
Board Approval for Project	N/A	January 2024
Commodore Substation – Land Acquisition	February 2024	August 2024
Commodore Substation – Permitting	November 2024	February 2025
Commodore Substation – Construction	February 2025	November 2026
Commodore Substation – Proposed In-Service Date		November 2026
Waterford 230kV Substation Upgrade	October 2026	November 2026
Waterford-Commodore 230kV Line – ROW Acquisition	December 2023	January 2025
Waterford-Commodore 230kV Line – Permitting	June 2024	June 2025
Waterford-Commodore 230kV Line – Construction	July 2025	December 2026
Waterford-Commodore 230kV Line – Proposed		
In-Service Date		December 2026
Iberville-Commodore 230kV Line Rebuild	September 2025	October 2025

#### 7

# 8

# VII. SUMMARY OF PROJECT COSTS

# 9 Q32. HAS THE COMPANY DEVELOPED AN ESTIMATE OF THE COSTS TO

# 10 CONSTRUCT THE WEST BANK 230kV PROJECT?

11 A. Yes, the Company created a Class 3 estimate for each component of the Project, which

# 12 is subject to a range of uncertainty between -20% and +30%. Accordingly, the current

- 13 cost estimate for the Project is \$498.8 million, which is the amount for which the
- 14 Company has approved funding and is comprised of preliminary estimates of project

Public Redacted Version

1		costs based on the information currently available. As the Project is further developed,
2		more refined cost estimates will be completed. The current estimates for each
3		component of the Project detailed in Section IV above are summarized in HSPM
4		Exhibit CRW-6.
5		
6	Q33.	IN ADDITION TO THE COSTS IDENTIFIED ABOVE IN SECTION IV, HSPM
7		EXHIBIT CRW-6 INCLUDES A LINE ITEM FOR A DISTRIBUTION BUDGET.
8		PLEASE EXPLAIN WHAT THAT IS.
9	A.	The distribution budget of \$ reflected in HSPM Exhibit CRW-6 reflects the
10		cost of distribution line re-routes the Company anticipated at the Waterford 230kV
11		Substation at the time the Project budget was approved. However, the Company has
12		subsequently determined that those distribution line re-routes will not be necessary.
13		Additionally, distribution lines located at the Commodore Substation location are under
14		evaluation to determine if they meet required clearances with the installation of the new
15		facilities.
16		As noted above in Q10, the construction of the Commodore Substation includes
17		distribution-related work to route temporary construction power (approximately 0.7
18		mile) to the Commodore Substation from an existing nearby distribution line and the
19		cost to provide a 300kVA transformer for permanent power to the substation. Those
20		costs are included in the \$ budget for the Commodore Substation.
21		

1	Q34.	IN ADDITION TO THE COSTS IDENTIFIED ABOVE IN SECTION IV, HSPM
2		EXHIBIT CRW-6 INCLUDES A LINE ITEM FOR INDIRECT TOTAL COSTS.
3		PLEASE DESCRIBE WHAT THOSE ARE.
4	A.	Indirect costs include the following types of costs:
5		• Allowance for Funds Used During Construction ("AFUDC") - This
6		allocates the costs of funds used for a capital project ( <i>i.e.</i> , debt and equity).
7		These costs are capitalized as part of the cost of the Project and can be
8		recovered over the life of the assets through depreciation.
9		• Capital Suspense Allocation – This distributes costs associated with
10		administrators. The purpose of the capital suspense allocation is to
11		distribute these capital overhead charges to specific Capital Funding
12		Projects and Work Orders.
13		• Loaders/Others – This includes an allocation of the overhead costs to
14		procure, track, and issue materials and supplies utilized for the construction
15		of the Project.
16		
17	Q35.	PLEASE DESCRIBE THE ACTIONS BEING TAKEN TO REFINE THE COST
18		ESTIMATE FOR THE WEST BANK 230kV PROJECT.
19	A.	There are several actions being taken to refine the Project cost estimate. First, the
20		Company has begun negotiations with the landowner to obtain the required property
21		for the proposed Commodore Substation property. The results of those negotiations
22		will affect the Project cost. Second, for the transmission line segments of this Project,
23		ELL retained a third-party contractor and has completed a transmission line route study

#### Entergy Louisiana, LLC Direct Testimony of Catherine Ward LPSC Docket No. U-\_\_\_\_

1 for the transmission line segments of the Project. These route studies evaluate possible 2 routes for the new transmission lines and take into account many factors, including the 3 number of landowners affected, the number of habitable structures near the possible 4 routes, environmental impacts, and cultural/historical considerations. The results of 5 these studies have allowed ELL to establish a baseline transmission line route for the 6 project. The baseline route is used to define how much additional ROW needs to be 7 acquired and to identify the permits required, the amount of wetlands affected, and 8 other project-specific details. The baseline route is subject to adjustment based on 9 factors that may come to light, including items such as previously unidentified 10 impediments to construction and landowners' requests to alter the route on that 11 landowner's property where that request can be reasonably accommodated. The 12 Company has started to acquire ROW along identified route. Third, based on these 13 project scoping efforts, ELL has requested proposals from several contractors for 14 engineering, procurement, and construction services, which will help refine the project 15 estimate after negotiations are complete. Fourth, based on the results of the ROW 16 acquisition activities, ELL would as necessary update the estimates for ROW 17 acquisition and environmental permitting based on the amount of ROW to be acquired, 18 and the total acreage of potential wetlands to be impacted by the Project.

19

1	Q36.	WHAT ARE THE CATEGORIES THAT COMPRISE THE TOTAL ESTIMATED
2		COSTS OF THE WEST BANK 230kV PROJECT?
3	A.	I have attached an itemized estimate of Project costs (by category) as HSPM Exhibit
4		CRW-7 to my Direct Testimony. The exhibit identifies both direct costs and indirect
5		costs of the Project.
6		
7	Q37.	WHAT ARE THE ANTICIPATED SOURCES OF FUNDING FOR THE WEST
8		BANK 230kV PROJECT?
9	A.	At this time, funding for the Project is expected to come from operating funds of the
10		Company.
11		
12	Q38.	HAS THE COMPANY DEVELOPED AN ESTIMATE OF THE OPERATING AND
13		MAINTENANCE ("O&M") COSTS THAT WILL BE INCURRED ON AN
14		ONGOING BASIS TO MAINTAIN THE COMPONENTS OF THE PROJECT
15		AFTER CONSTRUCTION?
16	A.	Yes. It is important to note that O&M expenses will not be incurred until after the
17		components of the Project are placed in service starting in November 2026. During the
18		Project's first year of operation, it is expected that the operation and maintenance will
19		not be significant. Operation and maintenance expenses will consist mainly of labor to
20		perform preventative maintenance inspections on the facilities. The estimated annual
21		O&M costs for the new Commodore Substation and Waterford – Commodore 230kV
22		transmission line are approximately \$160,000 (subject to inflation), including
23		approximately \$ for the substation and \$ for the transmission line.

1		Substation components of the cost include ground treatment, anticipated breaker and
2		transformer maintenance identified by monthly preventative maintenance inspections,
3		and attention to any miscellaneous alarms. The transmission lines would be maintained
4		with ROW floor maintenance (bi-annual), and three annual aerial patrols. A walking
5		inspection would begin on the 12th year and be performed every 12 years (1/12 per
6		year) for the new transmission lines. Annual cost estimates do not consider inflation
7		or potential market fluctuations and should be considered the best information that the
8		Company currently has for these O&M expenses.
9		
10		VIII. CONCLUSION
11	Q39.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
12	A.	Yes, at this time.

#### AFFIDAVIT

# PARISH OF EAST BATON ROLOF

**NOW BEFORE ME,** the undersigned authority, personally came and appeared, **Catherine Ward**, 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.

in Wind

Catherine Ward

SWORN TO AND SUBSCRIBED BEFORE ME THIS 19th DAY OF MARCH 2024 **NOTARY PUBL/IC** RYAN N. OURS NOTARY PUBLIC My commission expires: TATE BAR NO. 27735 STATE OF LOUISIANA MY COMMISSION EXPIRES AT DEATH

#### LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY
LOUISIANA, LLC FOR EXEMPTION
AND/OR CERTIFICATION OF THE
WEST BANK 230kV TRANSMISSION
PROJECT IN ACCORDANCE WITH
LOUISIANA PUBLIC SERVICE
COMMISSION GENERAL ORDER
DATED OCTOBER 10, 2013

DOCKET NO. U-\_\_\_\_

#### **EXHIBIT CRW-1**

# HIGHLY SENSITIVE PROTECTED MATERIAL

## **INTENTIONALLY OMITTED**



EXISTING 230KV LINE EXISTING 500KV LINE











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#### LPSC Docket No. U-Exhibit CRW-3 Page 7 of 7





LPSC Docket No. U-



LPSC Docket No. U-







#### LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY
LOUISIANA, LLC FOR EXEMPTION
AND/OR CERTIFICATION OF THE
WEST BANK 230kV TRANSMISSION
PROJECT IN ACCORDANCE WITH
LOUISIANA PUBLIC SERVICE
COMMISSION GENERAL ORDER
DATED OCTOBER 10, 2013

DOCKET NO. U-\_\_\_\_

#### EXHIBIT CRW-6

# HIGHLY SENSITIVE PROTECTED MATERIAL

## **INTENTIONALLY OMITTED**

#### LOUISIANA PUBLIC SERVICE COMMISSION

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APPLICATION OF ENTERGY
LOUISIANA, LLC FOR EXEMPTION
AND/OR CERTIFICATION OF THE
WEST BANK 230kV TRANSMISSION
PROJECT IN ACCORDANCE WITH
LOUISIANA PUBLIC SERVICE
COMMISSION GENERAL ORDER
DATED OCTOBER 10, 2013

DOCKET NO. U-\_\_\_\_

#### EXHIBIT CRW-7

# HIGHLY SENSITIVE PROTECTED MATERIAL

## **INTENTIONALLY OMITTED**

#### LOUISIANA PUBLIC SERVICE COMMISSION

APPLICATION OF ENTERGY	)
LOUISIANA, LLC FOR EXEMPTION	)
AND/OR CERTIFICATION OF THE	)
WEST BANK 230kV TRANSMISSION	)
PROJECT IN ACCORDANCE WITH	)
LOUISIANA PUBLIC SERVICE	)
COMMISSION GENERAL ORDER	)
DATED OCTOBER 10, 2013	)

DOCKET NO. U-\_\_\_\_

#### **DIRECT TESTIMONY**

#### OF

#### RYAN D. JONES

#### **ON BEHALF OF**

#### **ENTERGY LOUISIANA, LLC**

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# EXHIBIT LIST

Exhibit RDJ-1	Listing of Previous Testimony Filed by Ryan D. Jones	
Exhibit RDJ-2	Revenue Requirement Calculation	
1		I. <u>QUALIFICATIONS</u>
-----	-----	---
2	Q1.	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
3	A.	My name is Ryan D. Jones. I am employed by Entergy Louisiana, LLC ("ELL") as
4		Manager, Regulatory Affairs. My business address is 4809 Jefferson Highway,
5		Jefferson, Louisiana 70121.
6		
7	Q2.	ON WHOSE BEHALF ARE YOU TESTIFYING?
8	A.	I am testifying before the Louisiana Public Service Commission ("LPSC" or the
9		"Commission") on behalf of ELL.
10		
11	Q3.	PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.
12	A.	I hold a Bachelor of Science in Management degree with a major in Finance from
13		Tulane University in New Orleans. I also hold a Master of Management in Energy
14		from Tulane University. I began working for Entergy Services, LLC ("ESL") in 2015
15		as a Financial Analyst where I maintained the budget and components of the financial
16		model and provided additional support for utility operations support groups within
17		ESL. In 2018, I transferred to work for Louisiana Regulatory Affairs and have accepted
18		roles of increasing responsibility since that time. In my current capacity as Manager,
19		Regulatory Affairs, I am responsible for providing regulatory support services to ELL
20		and for coordinating various dockets and filings before the LPSC. I am also responsible
21		for providing insight and guidance to various organizations across ELL and ESL on
22		regulatory matters and compliance with Orders of the Commission.
• •		

1	Q4.	HAVE YOU PREVIOUSLY TESTIFIED IN ANY REGULATORY PROCEEDING?
2	A.	Yes. A listing of the cases in which I have previously testified is attached hereto as
3		Exhibit RDJ-1.
4		
5		II. <u>PURPOSE OF TESTIMONY</u>
6	Q5.	PLEASE EXPLAIN THE RELIEF SOUGHT BY THE COMPANY IN THIS
7		PROCEEDING.
8	A.	In compliance with the Commission's Transmission Siting Order, <sup>1</sup> ELL is seeking an
9		exemption from LPSC certification with respect to the construction of the portfolio of
10		transmission projects required to add (1) a new 500/230kV Substation ("Commodore
11		Substation") on the West Bank of the Mississippi River ("West Bank") in ELL's Amite
12		South Planning Region ("Amite South") <sup>2</sup> in Iberville Parish, Louisiana and (2)
13		approximately sixty (60) miles of new 230kV transmission line to connect the existing
14		Waterford Substation to the new Commodore Substation (the "West Bank 230kV
15		Project" or "Project"). This exemption is requested on the basis that the Project is being
16		undertaken by the Company for the primary purpose of accommodating two new
17		industrial block loads to be located on the West Bank, one associated with the
18		expansion of existing customer facilities and the other associated with a new industrial
19		plant (together, the "New 230kV Block Loads").

<sup>&</sup>lt;sup>1</sup> See General Order (Oct. 10, 2013), In Re: Determination as to Whether the Commission Should Issue a General Order Asserting Jurisdiction Over the Certification of Utility Transmission Projects and the Determination of Whether Those Projects Are in the Public Interest ("Siting Order") at Section VIII(6), Docket No. R-26018.

<sup>&</sup>lt;sup>2</sup> The Amite South planning region is generally described as the area from east of the Baton Rouge metropolitan area to the Mississippi state line and south from the Amite Substation to the Gulf of Mexico.

1		Alternatively, in the event the Commission determines that the West Bank
2		230kV Project or any part of the Project does not qualify for an exemption under the
3		Transmission Siting Order, the Company requests LPSC certification that the Project
4		serves the public convenience and necessity and is thus eligible for recovery in rates.
5		The Company's Application, including its supporting testimony and exhibits,
6		provides (1) the information required to support the application of the exemption
7		established at Section VIII(6) of the Transmission Siting Order or, alternatively (2) the
8		information required pursuant to Section V of the Transmission Siting Order to show
9		that the proposed construction of the Project is in the public interest.
10		
11	Q6.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
12	A.	The purpose of my Direct Testimony is to describe the requirements of the
13		Transmission Siting Order, and to explain why the Project qualifies for the exemption
14		under Section VIII(6) of the Siting Order. I further address how the testimony and
15		exhibits included with the Company's Application provide the information required for
16		the Commission to certify that the Project is in the public interest in compliance with
17		the Transmission Siting Order. In addition, I provide the estimated revenue
18		requirement of the Project as well as a discussion of the potential bill effects associated
19		with the Project.

### 1 III. <u>QUALIFICATION FOR EXEMPTION UNDER THE SITING ORDER</u>

### 2 Q7. PLEASE DESCRIBE GENERALLY THE TRANSMISSION SITING ORDER.

3 A. The Transmission Siting Order was the result of the LPSC rulemaking initiated in 4 Docket No. R-26018. The purpose of that docket was to consider whether the LPSC 5 should exercise its jurisdiction over the certification and siting of transmission projects 6 constructed in Louisiana. At the end of the rulemaking process, the Commission 7 concluded that it should exercise its jurisdiction over the certification and general 8 routing of certain specifically identified transmission projects, which the order defines 9 as "Transmission Facilities." The Order defines a Transmission Facility as "a system 10 of structures, wires, insulators and associated hardware, but not including switching or 11 substations, that carry electric energy over distances and that are located in whole or in 12 part within the State of Louisiana and furnish electric service within the state, that 13 would be constructed and operated at or above a nominal 100kV, exceeds one mile in 14 length, and the estimated cost to construct exceeds \$20 million. A Transmission 15 Facility shall include the construction of any projects, or group/portfolio of projects, designed to resolve a common transmission-related concern."<sup>3</sup> The Commission later 16 17 initiated a proceeding in October 2021 in Docket No. R-36199 to consider whether the 18 Transmission Siting Order should be modified so that the Commission may retain its 19 jurisdictional authority over transmission siting in light of changes in law and 20 transmission planning practices since the time that the Transmission Siting Order was

See Transmission Siting Order, Section II.A. at 9-10.

adopted. As of the date of this testimony, no modifications to the Transmission Siting
 Order have been adopted.

The Order generally provides that any utility seeking to construct a transmission project meeting the definition of Transmission Facility must first obtain LPSC certification that the project serves the public convenience and necessity, unless it qualifies for certain enumerated exemptions. For example, the Transmission Siting Order exempts from certification projects undertaken for the primary purpose of "accommodating the needs of a new or expanding industrial load or set of industrial loads located in Louisiana."<sup>4</sup>

10

## 11 Q8. DOES THE PROJECT QUALIFY AS A TRANSMISSION FACILITY UNDER THE12 TRANSMISSION SITING ORDER?

A. Yes. As explained in greater detail by Company witnesses Mr. Kline and Ms. Ward,
the Project consists of a new 230kV transmission source into the same area. The Project
also consists of a new substation, which does not qualify as a Transmission Facility
under the Transmission Siting Order's definition.

17

# 18 Q9. IS THE PROJECT SUBJECT TO ANY OF THE EXEMPTIONS PROVIDED IN19 SECTION VIII OF THE TRANSMISSION SITING ORDER?

A. Yes, at least as I appreciate the Order. Section VIII(6) exempts new transmission point of-delivery facilities, including radial lines, loop flow lines, switching stations,

See Transmission Siting Order, Section VIII.6.

1	substations, and any other transmission projects undertaken for the primary purpose of
2	accommodating the needs of a new or expanding industrial load or set of industrial
3	loads located in Louisiana. <sup>5</sup> My Direct Testimony, together with the direct testimonies
4	of the other Company witnesses, supports the applicability of the exemption established
5	at Section VIII(6) of the Siting Order to the Project.

6 In their direct testimonies, Company witnesses Ms. Laura Beauchamp and Mr. 7 Bradley Skok explain that the West Bank 230kV Project is being undertaken for the 8 primary purpose of accommodating the needs of a new or expanding industrial load or 9 set of industrial loads located in Louisiana (*i.e.*, the New 230kV Block Loads); and they 10 further explain why the Project is necessary for the Company to be able to provide 11 reliable electric service to these new and expanding industrial loads. The Project 12 includes a new substation and several related transmission components designed to 13 provide electric service to this new set of industrial loads. As Mr. Skok explains, but 14 for the Project, the Company would not be able to serve the New 230kV Block Loads; 15 and the Project has been undertaken for the primary purpose of enabling the Company 16 to serve those new loads. As such, the primary purpose of the Project is to accommodate the needs of a new set of industrial loads located in Louisiana, and the 17 18 Project therefore qualifies for exemption under Section VIII(6) of the Commission's 19 Siting Order. While the facts support that all components of the Project qualify for an

<sup>&</sup>lt;sup>5</sup> The Commission Staff has proposed changes to the Siting Order, including modifications to the exemption at issue in this filing (Section VIII(6) of the Siting Order). Staff's proposal remains pending before the Commission. *See* Initial Staff Report and Recommendation for a Revised Siting Order (September 1, 2023), *In re: Review and Possible Modification of the Commission's General Order Dated October 10, 2013 Governing Transmission Certification and General Siting*, Docket No. R-36199.

1		exemption under Section VIII(6), certain individual components of the Project may
2		also qualify under various other provisions of the Siting Order, including Sections
3		VIII(1) (exempting new substations), VIII(5) (exempting projects needed to address
4		violations of NERC standards), and VIII(7) (exempting projects that are in the nature
5		of rebuilds, upgrades, or modernization or reconstruction of equipment to increase its
6		capacity).
7		
8 9		IV. <u>THE WEST BANK 230kV PROJECT SERVES THE</u> <u>PUBLIC CONVENIENCE AND NECESSITY</u>
10	Q10.	GIVEN THAT THE PROJECT APPEARS TO BE EXEMPT FROM THE
11		CERTIFICATION REQUIREMENT OF THE TRANSMISSION SITING ORDER,
12		WHY IS THE COMPANY SEEKING COMMISSION CERTIFICATION THAT
13		THE PROJECT WOULD SERVE THE PUBLIC CONVENIENCE AND
14		NECESSITY?
15	A.	While the Company believes the Project to be exempt from certification under the
16		Transmission Siting Order, it is making this filing seeking confirmation of the same
17		due to the financial significance and operational importance of the Project and
18		recognizing that, because of those attributes, the Commission may wish to examine the
19		Project in greater detail. There is also the potential that the Commission may find that
20		not all components are exempted, and, in that case, commencement of construction
21		prior to Commission certification could potentially constitute a violation of the
22		Transmission Siting Order. Therefore, the Company is also submitting with this Filing
23		sufficient information for the Commission to certify, as an alternative to granting the

1 exemption, that the Project would serve the public convenience and necessity. This will 2 ensure that there is no unnecessary delay in the execution timeline that would put at 3 risk the realization of economic development opportunities described by Company 4 witnesses Ms. Beauchamp and Mr. May. 5 6 O11. YOU MENTIONED THE FINANCIAL AND OPERATIONAL SIGNIFICANCE OF 7 THE WEST BANK 230kV PROJECT. CAN YOU ELABORATE? 8 A. As described by Ms. Ward, the estimated total cost of \$498.8 million to construct the 9 Project represents a significant investment. As explained by Ms. Beauchamp, the 10 Amite South region has roughly 5,000 MW of forecasted load additions along the West 11 Bank under study by ESL for the commencement of service during the period between 12 2023 and 2030, an increase of approximately 300% over the current load in Amite 13 South if all 5,000 MW of load materialized. That growth is driven by several 14 significant projects in Louisiana's economic development pipeline that, if brought to 15 fruition, will bring tens of billions of dollars in additional capital investment. As Ms. 16 Beauchamp, Mr. Kline, and Mr. Skok discuss in their Direct Testimonies, reliable 17 transmission infrastructure is critical to growing the region and the state economy and 18 to ensuring that the industries locating here have access to the reliable power delivery 19 systems that are needed to support their operations.

Mr. Kline and Mr. Skok also describe the studies conducted by ESL and Midcontinent Independent System Operator, Inc. ("MISO") that led to the determination that the Project (together with the 500kV transmission line that will be the subject of a future certification application by the Company) is the most effective

1 project among several alternatives for meeting the reliability needs of the Amite South 2 area and will be necessary to serve the forecasted load growth in the Amite South area. 3 In that description, Mr. Skok explains how those studies (which are attached as Exhibits 4 BDS-2 and BDS-4 to Mr. Skok's Direct Testimony) indicate that, unless the West Bank 5 230kV Project is completed, the Company will not be able to accommodate the needs 6 of the New 230kV Block Loads in the Amite South area while remaining compliant 7 with NERC standards. In addition, Mr. Skok also describes how the different 8 components of the Project provide solutions to accommodate the high area economic 9 growth and to secure the reliability of the area's transmission grid. This historically 10 significant economic development is expected to bring about increases in residential 11 and commercial load as well. So again, considering the magnitude of the expected 12 investment associated with the Project and the operational and economic significance 13 of the Project, the Company believes that, if it is determined the Project is not exempted 14 from certification, it would be appropriate for the Commission to have the opportunity 15 to make the necessary public interest determination without the need for further filings 16 by the Company and the resulting delay.

17

# Q12. BEFORE YOU EXPLAIN WHY THE CONSTRUCTION OF THE WEST BANK 230kV PROJECT IS IN THE PUBLIC INTEREST, WOULD YOU FIRST DESCRIBE THE TERM "PUBLIC INTEREST" AS YOU UNDERSTAND IT?

A. Yes. In testimony before this Commission, the public interest has been previously
described as "that which is thought to best serve everyone; it is the common good." If

1	the net effect of a decision is believed to be positive or beneficial to society as a whole,
2	it can be said that the decision serves the "public interest."
3	Electric utilities have a pervasive effect on the public interest. Virtually all
4	elements of society rely on the provision of reliable, economic electric service. Electric
5	utilities have the ability to affect the standard of living of the population within the area
6	they serve by influencing the cost of doing business for the businesses that they serve,
7	affecting the cost of living and quality of life for residential customers, and affecting
8	the interests of investors. In sum, public utilities affect the general level of economic
9	activity and social well-being in the State of Louisiana.
10	I am not aware of any single simple standard or principle that can be immutably
11	applied to determine whether a particular decision or policy is "in the public interest."
12	Determining whether a decision is "in the public interest" requires a balancing of the
13	various effects of a particular course of action measured subjectively over the longer
14	run. Whether a course of action is "in the public interest" will depend upon factors that
15	are potentially quantifiable on an estimated basis, such as likely changes in rates, as
16	well as upon other factors that are not quantifiable, such as the effect of that course of
17	action on the robustness of a competitive market. The public interest, however, cannot
18	simply be defined as lower prices, as the Louisiana Supreme Court has made clear:
19 20 21 22 23 24	The entire regulatory scheme, including increases as well as decreases in rates, is indeed in the public interest, designed to assure the furnishing of adequate service to all public utility patrons at the lowest reasonable rates consistent with the interest both of the public and of the utilities.
25 26 27	Thus the public interest necessity in utility regulation is not offended, but rather served by reasonable and proper rate increases notwithstanding that an immediate and incidental effect of any

1 2 3		increase is improvement in the economic condition of the regulated utility company. <sup>6</sup>
4		Finally, while witnesses can provide facts and opinions that bear on this issue,
5		it is only the decision-maker, the Commission in this instance, who can reach a
6		conclusion as to whether the construction of the Project is in the public interest.
7		
8	Q13.	DOES THE PROJECT SATISFY THE REQUIREMENT OF THE TRANSMISSION
9		SITING ORDER THAT THE PROJECT BE IN THE PUBLIC INTEREST?
10	А.	Yes, I believe it does. In issuing the Transmission Siting Order, the Commission
11		acknowledged that it would certify a project it finds "to be in the public interest and the
12		interests of affected ratepayers, enhances reliability of service, and/or provides
13		economic benefits." <sup>7</sup> "In making that determination the Commission may consider the
14		expected impact of such Transmission Facility on costs, retail rates, service reliability,
15		reduction of congestion, the interstate or intrastate benefits expected to be achieved,
16		and whether the proposed Transmission Facility is consistent with public policy."8 In
17		addition, the Commission may consider "whether construction of this Transmission
18		Facility (as opposed to construction of another transmission facility or construction of
19		generation, for example) is a reasonable and cost-effective solution to the problem
20		being addressed in the Application."9

<sup>&</sup>lt;sup>6</sup> See City of Plaquemine v. Louisiana Pub. Serv. Comm'n, 282 So. 2d 440 (1973).

<sup>&</sup>lt;sup>7</sup> See Transmission Siting Order, Section IV, at 10.

<sup>&</sup>lt;sup>8</sup> Id.

<sup>&</sup>lt;sup>9</sup> *Id.* at 10-11.

1 The Project surpasses these standards. As explained by Mr. Skok, the Project 2 provides needed transmission capacity in the Amite South area, thereby maintaining 3 and enhancing the reliability of service to all customers – both existing and future – in 4 that area. It will also facilitate opportunities to grow Louisiana's economy by providing 5 a new 230kV source (and subsequently, a new 500kV transmission source) into the 6 Amite South area where, as Ms. Beauchamp explains, load is expected to increase by 7 as much as 300% by 2030. The Project will enable economic growth and job creation 8 in the area. In addition, this increase in load will mitigate cost increases for all 9 customers.

10 As explained by Mr. Skok, the Project resulted from ELL's detailed and 11 thorough analysis indicating that the Project is the most effective method of providing 12 the additional transmission capacity needed to address reliability issues projected to 13 occur in the Amite South area of the ELL Transmission System. These reliability issues 14 were identified by ELL's internal transmission analysis as part of the bottom-up planning process through which the Project was identified as the recommended 15 16 corrective action plan to address those projected reliability issues. In addition, MISO's 17 planning staff independently evaluated the system performance for its ability to meet 18 applicable reliability standards without the proposed project and found that the Project 19 is needed to meet applicable reliability standards. Like the Company, MISO also 20 evaluated other alternatives to the Project and concluded that the Project is the best 21 alternative to address the projected reliability issues in the Amite South area. Based on 22 all these factors, I believe that the Project is firmly in the public interest and should be 23 certified as such by the Commission if it is not found to be exempted from certification.

1		
2	Q14.	HAS THE COMPANY PROVIDED ALL INFORMATION REQUIRED BY THE
3		TRANSMISSION SITING ORDER?
4	А.	Yes. Through my Direct Testimony and the Direct Testimonies of its other witnesses,
5		the Company has provided the information required by the Transmission Siting Order
6		as follows:
7		• Requirement V.1: ELL is the Applicant in this proceeding and the only entity
8		participating in the construction of the Project.
9		• Requirement V.2: Ms. Ward provides a description of each component of the
10		Project.
11		• Requirement V.3: Ms. Beauchamp, Mr. Kline, and Mr. Skok provide detailed
12		explanations of the justification for the Project. In addition, Mr. Skok
13		describes the analyses performed by ELL and MISO to determine that the
14		Project is needed to improve reliability, accommodate projected load growth,
15		and increase load-serving capability in a transmission-constrained region of
16		the area served by ELL.
17		• Requirement V.4: Ms. Ward provides the general proposed location of each
18		component of the Project.
19		• Requirement V.5: Ms. Ward discusses the anticipated source of funding for
20		the Project.
21		• Requirement V.6: Ms. Ward provides the Company's current best estimate of
22		the cost of each component of the Project, which she explains is a Class 3

1	estimate and is subject to change as the project is more fully developed and
2	refined.
3	• Requirement V.7: I provide a discussion below of the effect that the Project
4	will have on customer rates.
5	• Requirement V.8: As an exhibit to her testimony, Ms. Ward provides single-
6	line drawings of the typical structures anticipated to be used in constructing
7	the Project.
8	• Requirement V.9: Ms. Ward discusses the current schedule and timeline for
9	completing construction of each component of the Project and placing them in
10	service.
11	• Requirement V.10: Ms. Ward explains the Company's current plans for right-
12	of-way acquisition.
13	• Requirement V.11: Mr. May and Ms. Beauchamp provide other information
14	that the Company considers relevant to support a public interest determination
15	(e.g., the need to expand the Company's infrastructure and transmission
16	capacity to accommodate the significant industrial expansion underway in the
17	Amite South region).
18	All of this information details the significant planning and analyses that have already
19	gone into developing the Project and the Company's reasonable plan for completing
20	the development and construction to bring the reliability benefits of the Project to its
21	customers.
22	

### Q15. IS THE COMPANY REQUESTING THAT THE COMMISSION CERTIFY HERE THE SPECIFIC PARCEL-BY-PARCEL SITING OF THE PROJECT?

3 A. No. In fact, the Transmission Siting Order specifically excludes this type of approval 4 from the scope of the Commission's certification authority, noting that the 5 Commission's review shall be in addition to, and is not intended to eliminate, any other approvals that may be required under local, state and/or federal law.<sup>10</sup> As such, the 6 7 Company is only requesting that, if the Commission does not grant the requested 8 exemption, the Commission determine that the Project is in the public interest and 9 authorize its construction along the generalized substation-to-substation corridor (or 10 similar route) discussed by Ms. Ward.

11

## 12 Q16. IS THE COMPANY SEEKING EXPEDITED CONSIDERATION BY THE13 COMMISSION?

14 A. Not at this time. The facts and circumstances of the Project qualify it for exemption 15 from the certification requirements under the Transmission Siting Order, and the 16 Company therefore requests a Commission determination that such an exemption 17 applies. But the Company has also provided in this Application filing all information 18 necessary for the Commission to make a public interest determination in the alternative 19 so that such an alternative finding, if deemed required, can be made without 20 unnecessary delay. I note that the Transmission Siting Order provides that the 21 Company may request expedited consideration of the proposed facility and that if such

See Transmission Siting Order, Section IV, at 11.

1 a request is granted by the Commission Secretary, the Commission will use its best 2 efforts to act on the application within 90 days. Otherwise, the Commission's review 3 may extend to a total of 180 days depending on whether the application is contested. 4 Given the current schedule for the Project, the 180-day review period, if required, 5 should not affect the currently planned in-service dates described by Ms. Ward in 6 Section VI of her Direct Testimony. I note, however, that a significant delay beyond 7 the 180-day window provided by the Transmission Siting Order could delay the 8 construction start date for the Commodore Substation (February 2025) and thereby 9 jeopardize the Company's ability to complete construction in time to accommodate the 10 planned in-service dates of the New 230kV Block Loads, as described by Company 11 witness Catherine Ward (Q30) and explained by Company witness Laura K. 12 Beauchamp (Q23).

- 13
- 14 15

### V. <u>CALCULATION OF REVENUE REQUIREMENT</u> AND ESTIMATED BILL EFFECTS

16 Q17. WHY IS THE COMPANY PROVIDING A CALCULATION OF THE REVENUE

17 REQUIREMENT AND ESTIMATED BILL EFFECTS IN THIS PROCEEDING?

A. The Transmission Siting Order requires that a certification application include "[a]n
analysis, with supporting data, of the estimated effects on costs to ratepayers
attributable to the proposed Transmission Facility, including an estimate of the impact
of the cost of the Transmission Facility on rates of all the entity's customers within
Louisiana."<sup>11</sup> To comply with this requirement, I am providing the estimated revenue

See Transmission Siting Order, Section V.7. at 12.

1		requirement of the Project, based on the current estimated cost of the Project. I am also
2		providing the estimated effect on a residential customer bill for a customer using 1,000
3		kWh in the area served by ELL, assuming for purposes of this presentation only that
4		the Project revenue requirement will be recovered on a dollar-for-dollar basis.
5		
6	Q18.	IS THE COMPANY REQUESTING SPECIFIC RATE TREATMENT OF THE
7		COSTS OF THE PROJECT?
8	A.	Not at this time, as that will ultimately be addressed in the context of a rate proceeding
9		such as an annual Formula Rate Plan ("FRP") Evaluation Report Filing, a filing to
10		extend the FRP or some other base rate proceeding. Accordingly, the Company is not
11		asking for Commission approval of specific recovery of the Project revenue
12		requirement outside of the normal course of ratemaking. In this proceeding, the
13		Company is only requesting that the costs be deemed eligible for recovery, by virtue of
14		a Commission finding that construction of the Project is in the public interest, through
15		the FRP to the extent the Company remains subject to one, or to authorize the creation
16		of a regulatory asset until such time that the costs can be reflected in rates in order to
17		mitigate the effects of regulatory lag in the alternative where there is no FRP. In other
18		words, if the Company's FRP is still effective at the time that the Project is placed in
19		service, and the Company has not received approval of some specific alternative
20		recovery for the Project, the Company would recover the revenue requirement of the
21		Project through the normal FRP recovery mechanisms. If instead the Company is not
22		subject to an FRP and the costs have been recorded to an approved regulatory asset, it
23		would seek separate Commission approval for any recovery of the proposed regulatory

asset through a future rate proceeding. Since no specific recovery is being requested
 at this time, the estimated bill effects I provide may not be representative of the actual
 customer impact that will be seen, through an FRP or otherwise, associated with the
 Project, although I believe they are reasonable estimates of those effects.

5 For purposes of the discussion below, it is also important to note that the 6 estimated revenue requirement I am providing is based on a Class 3 estimate, which 7 reflects a range in the estimate of -20% to +30%. The Class 3 estimate is all that is 8 reasonably available at this stage of a large transmission project. As Ms. Ward 9 explains, the Class 3 estimate will be refined as the Project development progresses. 10 Therefore, while the estimated revenue requirement provided here is based on the best 11 information currently available to the Company, it is expected to change, and it will be 12 the final prudently incurred costs of the project that the Company seeks to recover in 13 customer rates. The Commission should not view the Company's preliminary estimate 14 as a cap or yardstick to assess the prudence of the Company's final project costs, as 15 costs can deviate from estimates made at this stage for many reasons unrelated to the 16 Company's prudence in executing the Project.

17

### 18 Q19. IS THE COMPANY WILLING TO SUBMIT STATUS REPORTS REGARDING 19 THE PROJECT SIMILAR TO THOSE IT FILED IN DOCKET NO. U-33645?

A. Yes. In its Order approving the Lake Charles Transmission Project ("LCTP") in Docket No. U-33645, the Commission adopted the Company's agreement (in a stipulated settlement) to file into the record and serve on the parties to the proceeding semi-annual monitoring and status reports reflecting updates on the status of the LCTP

1		construction and costs. <sup>12</sup> The Company filed monitoring reports beginning with the six-
2		month period immediately following Commission approval of the LCTP and continue
3		through completion of the Project. The Company also agreed to file a post-construction
4		report. The Company is willing to agree to submit similar status reports and a post-
5		construction report following Commission certification of the Project in this docket.
6		
7		A. Calculation of the Revenue Requirement
8	Q20.	PLEASE DISCUSS HOW THE REVENUE REQUIREMENT FOR THE PROJECT
9		WAS CALCULATED.
10	А.	The revenue requirement consists of two main components. The first component of
11		the revenue requirement is the estimated operation and maintenance ("O&M")
12		expenses for the Project. These expenses are difficult to predict with specificity when
13		considering that the project will not be placed in service until late 2026. As Ms. Ward
14		notes, the estimated annual O&M costs for the new Commodore Substation and
15		Waterford – Commodore 230kV transmission line are approximately \$160,000. For
16		the first year of operation, it is expected that the operation and maintenance expenses
17		incurred during the Project's first year of operation will not be significant. During that
18		year, it is expected that the majority of that expense will consist of the labor necessary
19		to perform preventive maintenance on the facility.
20		There are other expenses that will be incurred as a result of the construction of
21		the Project. Those expenses include property taxes. Given the early stages of the

See Order No. U-33645 (Jan. 6, 2016) at Sections VI(6) and (9), pp. 6-7.

1		Project development – it is more than two years away from being placed in service –
2		and the fact that specific parcels of land have not been designated at this time, those
3		expenses have not been quantified for purposes of estimating the revenue requirement
4		for the Project here.
5		
6	Q21.	WHAT IS THE SECOND COMPONENT OF THE REVENUE REQUIREMENT
7		FOR THE PROJECT?
8	A.	The second component of the revenue requirement is the return of and on rate base,
9		which first requires a calculation of the average rate base of the Project for the first year
10		of operation. That calculation, which is detailed in Exhibit RDJ-2, begins with the
11		estimated construction cost of \$498.8 million. For simplicity, this estimated revenue
12		requirement assumes that all components of the Project are placed in-service
13		simultaneously and these capital construction costs represent the amount to be included
14		in rate base on the first day that ELL places the Project in service.
15		Depreciation and amortization expense in the first year of ownership is
16		estimated to be \$9.976 million, based on the two percent depreciation rate utilized for
17		Transmission investment recovered pursuant to Section 3.F. of the currently effective
18		FRP. As shown in Exhibit RDJ-2, this expense, which represents the return of rate
19		base during the first year of Project operation, increases the reserve for depreciation
20		and amortization in the same amount and is a reduction to rate base in the first year of
21		ownership. The final step in determining the rate base is incorporating the accumulated
22		deferred income taxes ("ADIT"), which represent the tax effect of the timing
23		differences between book and tax depreciation and is a reduction to rate base. The end

1		result of these calculations is an average first-year rate base of \$491.986 million, as
2		detailed in Exhibit RDJ-2.
3		
4	Q22.	PLEASE EXPLAIN HOW THE RETURN ON RATE BASE FOR THE PROJECT
5		WAS THEN DETERMINED.
6	A.	The return on rate base is calculated by multiplying the pretax rate of return by the
7		average rate base discussed above. For purposes of this calculation, I use the pretax
8		rate of return based on the Company's capitalization ratios and cost rates of capital
9		which were determined as of December 31, 2022, and were most recently utilized in
10		the Company's TY22 FRP Evaluation Report filing, as shown in Exhibit RDJ-2.
11		
12	Q23.	ARE THERE ANY FURTHER ADJUSTMENTS NEEDED TO CALCULATE THE
13		TOTAL FIRST YEAR REVENUE REQUIREMENT FOR THE PROJECT?
14	A.	Yes, there are two additional adjustments necessary to compute the retail revenue
15		requirement. First, the retail revenue requirement is adjusted by the Revenue
16		Conversion Factor to reflect uncollectible revenues, regulatory commission taxes, and
17		local franchise taxes. Then, the total revenue requirement must be multiplied by the
18		LPSC-Jurisdictional Retail Allocation Factor to arrive at the authorized retail revenue
19		requirement. ELL's retail allocation factor for purposes of calculating the Project
20		revenue requirement was considered to be 99.2%. The Revenue Conversion Factor is
21		1.01068 for ELL. Again, for the purposes of this calculation I am using the factors that
22		were most recently utilized in the Company's TY22 FRP Evaluation Report filing.
23		

### Q24. BASED ON ALL OF THESE INPUTS, WHAT IS THE COMPANY'S ESTIMATED RETAIL REVENUE REQUIREMENT FOR THE PROJECT?

A. As shown in Exhibit RDJ-2, ELL's revenue requirement for the Project, prior to
consideration of any offsets for other revenue received from transmission wholesale
customers, is equal to the sum of the annual operating costs and the return of and return
on rate base. That yields a total retail revenue requirement of \$57.754 million for the
Project.

8

## 9 Q25. WOULD THE RETAIL REVENUE REQUIREMENTS NOTED ABOVE BE 10 OFFSET BY OTHER REVENUES RECEIVED BY THE COMPANY?

11 Yes. The retail revenue requirement of the Project would be offset by transmission A. 12 wholesale revenues that the Company receives from those entities taking service on the 13 Company's transmission system. Those revenues are collected for transmission 14 customers' use of the Entergy Louisiana Transmission Pricing Zone ("TPZ") assets 15 pursuant to the MISO Tariff and based on the combined revenue requirement of the 16 Transmission Owners in the Entergy Louisiana TPZ. The Project will increase the 17 Company's revenue requirement and therefore increase the revenue received from 18 transmission customers, which will offset the retail revenue requirement for the Project.

1		B. Calculation of the Bill Effect
2	Q26.	HOW WOULD THE REVENUE REQUIREMENT FOR THE PROJECT AFFECT
3		CUSTOMER BILLS?
4	A.	Assuming the revenue requirement for the Project is reflected in rates on a dollar-for-
5		dollar basis, a residential customer using 1,000 kWh per month would experience a bill
6		increase of approximately \$1.50. However, as a reminder, since no specific recovery is
7		being requested at this time, the estimated bill effects I provide may not be
8		representative of the actual customer impact that will be seen, through an FRP or
9		otherwise. This estimate does not include the effects of any offsetting transmission
10		revenues. <sup>13</sup>
11		
12	Q27.	WHEN DOES THE COMPANY PROPOSE THAT THE REVENUE
13		REQUIREMENT FOR THE PROJECT BE REFLECTED IN RATES?
14	A.	Because the Company is not proposing any specific cost recovery for the Project and
15		the ultimate recovery mechanism is not known, it is not possible to provide an estimated
16		timeframe of when the revenue requirement for the Project will be reflected in rates.
17		With that said, the currently projected in-service date for the Project is late 2026.
18		Therefore, assuming an FRP similar to the current mechanism remains in place, the
19		revenue requirement of the Project would be part of the 2026 test year and would be
20		reflected in rates beginning September 2027 assuming the Commission has not

<sup>&</sup>lt;sup>13</sup> It is not possible for ELL to estimate the amount of offsetting transmission revenues that it will receive associated with the Project. Such projections would require data that are not in ELL's possession regarding the specific services and level/frequency of service wholesale customers will receive and the value of ELL's eligible transmission facilities relative to that of the facilities in the overall Entergy Louisiana TPZ.

1		authorized different specific recovery for the Project. However, if the Company does			
2		not remain subject to an FRP similar to the current one, the timeframe for recovery			
3	would be dependent upon the outcome of a future rate proceeding.				
4					
5		VI. <u>CONCLUSION</u>			
6	Q28.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?			
7	A.	Yes.			

### AFFIDAVIT

### STATE OF LOUISIANA

### **COUNTY OF JEFFERSON**

**NOW BEFORE ME**, the undersigned authority, personally came and appeared, **Ryan D. Jones**, who after being duly sworn by me, did depose and say:

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

D. Jones

SWORN TO AND SUBSCRIBED BEFORE ME THIS  $\mathbb{Z}^{1 \text{ st}}$  DAY OF MARCH 2024

NOTARY PUBLIC

My commission expires: Upon death

MATTHEW T. BROWN NOTARY PUBLIC State of Louisiana My Commission Is Issued for Life La Notary No. 61591

Listing of ]	Previous	Testimony	Filed by	Ryan	D Iones
Listing of I	lievious	resumony	rneu by	у пуан	D. JUIES

DATE	TYPE	<b>JURISDICTION</b>	DOCKET NO.
08/22/2019	Affidavit	LPSC	U-35370
06/17/2021	Settlement	LPSC	U-35584
12/08/2021	Direct	LPSC	U-36222
4/21/2022	Direct	LPSC	U-36338
11/14/2022	Settlement	LPSC	U-36222
11/15/2022	Rebuttal	LPSC	U-36338
12/29/2022	Settlement	LPSC	U-36338 U-34951, U-35205,
10/31/2023	Affidavit	LPSC	U-35581, U-36092, U-36381
12/11/2023	Direct	LPSC	S-37079
1/31/2024	Affidavit	LPSC	S-37113
3/5/2024	Direct	LPSC	U-37131

### Entergy Louisiana, LLC

#### WEST BANK 230KV PROJECT REVENUE REQUIREMENT

#### DERIVATION OF THE REVENUE REQUIREMENT (Dollars in Thousands)

	First Year of Operation
A. Operation and Maintenance Expense	
<ol> <li>Substation Maintenance Expense</li> <li>T-Line Maintenance Expense</li> </ol>	38 122
3. Total Operation and Maintenance Expense	160
B. Return Of and On Rate Base	
<ol> <li>Pre-Tax Return</li> <li>Depreciation and Amortization Expense</li> <li>Equity AFUDC Gross Up</li> </ol>	41,278 9,976 206
4. Total Return Of and On Rate Base	51,460
C. Revenue Requirement	51,620
D. ELP Revenue Conversion Factor	1.01068
E. ELP LPSC Jurisidictional Retail Allocation factor	99.20%
F. ELP LPSC Jurisdictional Revenue Requirement	51,754

#### Entergy Louisiana, LLC

#### WEST BANK 230KV PROJECT REVENUE REQUIREMENT

#### DERIVATION OF THE COST OF CAPITAL

				Weighted Cost Rate	
Item	Amount	Ratio	Cost Rate	Post Tax	Pre Tax
A. Long Term Debt	8,591,854,488	50.39%	3.88%	1.96%	1.96%
B. Short Term Debt	17,393,361	0.10%	0.59%	0.00%	0.00%
C. Preferred Stock	0	0.00%	0.00%	0.00%	0.00%
D. Common Equity	8,441,842,490	49.51%	9.50%	4.70%	6.43%
E. Total	17,051,090,339	100.00%		6.66%	8.39%