

DESCRIPTION OF THE COSMOS PROJECT

Pursuant to legislation signed into law on January 30, 2024, Entergy Mississippi, LLC (“EML”) is making this Informational Filing which represents the second block load addition of a project for Amazon Web Services (“AWS” or “Customer”) (referred to herein as the “project” or the “Cosmos project”).¹ The purpose of the Cosmos project is to provide the electrical supply and service reliability for the projected new load growth due to AWS in Madison County, Mississippi. A map showing the EML’s existing certificated area and location of the Cosmos project near the Costas property along the southern edge of Madison County is attached as EXHIBIT B.

In order to serve the second block load addition, EML will construct the “Cosmos Substation,” a new 230 kilovolt (“kV”) expandable three-bay breaker-and-a-half-substation, initially equipped with nine breakers and six nodes. Three nodes will be available for three 230/34.5 kV 150 megavolt-ampere (“MVA”) transformers. One - 108 Megavar (“Mvar”) capacitor bank will be installed to the 230 kV bus, and two nodes will be required for two transmission source lines energized from a cut-in on EML’s Lake Castle to North Park transmission line located on the project site. The project also includes conducting remote end work at the Lakeover and Northpark Substations. The Cosmos Substation is strategically placed near AWS’s facilities to reduce line routing by the Customer of their 34.5 kV distribution line facilities from the substation fence line to their facilities. The Customer will take ownership at the point of demarcation located inside of the substation fence line at 34.5 kV on designated structures designed, owned, operated, and maintained by EML.

EML will design, construct, and continue to own and operate the Cosmos Substation. Rights-of-Way (“ROW”) will be required for the two-230 kV transmission lines between Lake Castle and Northpark Substations. ROW was obtained by the customer and ROW easements were transferred to EML.

As part of EML’s Transmission System within the MISO footprint, the Cosmos project will be constructed with the intention of maintaining and improving reliability and thereby reasonably mitigating the risk that performance of the transmission system will cause, or contribute, to customer interruptions. The Cosmos project and associated upgrades of existing infrastructure will be constructed to maintain a reliable and robust system capable of serving the new customer loads under anticipated conditions, achieved through EML’s compliance with mandatory North American Electric Reliability Corporation (“NERC”) reliability standards as well as with EML’s local planning criteria. Moreover, the Cosmos Substation facilities that are constructed will be highly reliable and perform as designed. Recognizing that even properly designed and maintained facilities can fail to perform as designed, EML seeks embedded resiliency with the short length of transmission lines, for example, and steel structures that mitigates damage from major storm events and will reduce customer minute interruptions (“CMI”). Thus, restoration will be faster.

¹ See Senate Bill No. 2001, Section 22 (2nd Extraordinary Session, 2024) (codified at Miss. Code Ann. § 77-3-271) (“Section 22”).

The estimated cost of the Cosmos project was originally \$73 million and represents the second block load addition of a three-block load addition originally estimated to cost over \$400 million. The costs will be reflected in EML's Formula Rate Plan ("FRP") initially through the Interim Facilities Mechanism and recovered through the FRP for the life of the assets. Non-fuel revenue collected from the customer will be included in the FRP to offset the project's revenue requirement.

EML has chosen to utilize a full engineering, procurement, and construction ("EPC") contract process for the scope of work for this project. The EPC contracting approach provides a single organization to manage the project. Entergy Services' Capital Projects group engaged in a competitive bid EPC contract process for the full engineering, procurement, and construction activities for all assets other than defined as owner's obligations. EML's obligations for this project include material procurement for certain long lead equipment; environmental permitting for new transmission lines; settings and remote transmitting unit configuration design; soil borings and LiDAR survey relative to scoping; owner's engineer design oversight; contract project management, and contract construction and safety oversight. All qualified local contractors were given the opportunity to bid on this project. These contractors have been approved through our supply chain process to bid on projects based on their safety and operational performance as well as capacity.

The MISO Transmission Expansion Plan ("MTEP"), developed annually by MISO, identifies the transmission system facilities to be constructed by Transmission Owners, Market Participants and Transmission Developers. Through a series of technical system analyses and collaborative meetings, planning engineers from MISO and Entergy work with Market Participants to identify conditions on the EML transmission system that require enhancements to satisfy reliability criteria defined in local, regional, and NERC Planning Standards. Market Participants are given an opportunity to submit projects addressing each identified limitation and MISO planning personnel compare the costs and benefits of the projects proposed by Market Participants with those proposed by EML. Following a stakeholder comment period, MISO planning personnel perform a final evaluation of the project alternatives and compile a list of preferred alternatives for MTEP recommendation. Facilities needed within the next five years are generally included in Appendix 'A' of the MTEP. The draft MTEP, including the recommended reliability projects as well as Market Efficiency Projects, Multi-Value Projects, and Other Projects, is submitted to the MISO Board of Directors for review and approval. Once the MISO MTEP is approved by the Board, Entergy and EML work to obtain the approvals needed to construct the approved projects.

In August 2023, EML submitted the Proposed Electric Facilities to MISO as a customer-driven type project in the Expedited Project Review ("EPR") process.² Within the MTEP process, "Other-type" load growth/enhanced reliability projects can be submitted through the EPR process if they are outside of the formal MTEP submission windows. These types of projects may be constructed to address issues to include, but not limited to, satisfying transmission owner and/or state and local planning criteria to interconnect new loads, address service reliability issues and localized economic issues other than violations of North American Electric Reliability Corporation ("NERC") or regional reliability standards. The Proposed Electrical Facilities were reviewed by stakeholders, then evaluated and approved by MISO Planning personnel in the October 2023

² In a submission to MISO, the Cosmos Substation was referred to as the "Costas 230 kV Substation."

Planning Advisory Committee meeting. Additionally, the Proposed Electric Facilities were included in the MTEP24 project portfolio and were determined by the MISO Board in December 2024 as satisfactory to the applicable criteria and planning principles recognized in the MISO MTEP process documented in Attachment 'FF' of the MISO Tariff.

Environmental permits for the Cosmos Substation were obtained by the original site owner Madison County Economic Development Authority ("MCEDA"). The Cosmos project is currently ahead of schedule for a planned in-service date of November 5, 2025.