# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSISSIPPI

ENTERGY MISSISSIPPI, LLC

IN RE: CONTINUED MODERNIZATION OF THE

GENERATING FACILITIES OF ENTERGY EC-123-0082-00

MISSISSIPPI, LLC WITH THE

ACQUISITION OF THE SUNFLOWER

SOLAR FACILITY IN SUNFLOWER

COUNTY, MISSISSIPPI

AND

SUNFLOWER COUNTY SOLAR

PROJECT, LLC

2018-UA-267

## ORDER

THIS CAUSE came before the Mississippi Public Service Commission ("MPSC" or "Commission") on the Joint Petition for Certificates of Public Convenience and Necessity ("Joint Petition") filed by Entergy Mississippi, LLC ("Entergy Mississippi" or "EML") and Sunflower County Solar Project, LLC ("SCSP") on December, 2018, pursuant to the Mississippi Public Utilities Act of 1956, Section 77-3-1, et seq., of the Mississippi Code of 1972, as amended, ("Act") and the MPSC Rules of Practice and Procedure (the "Procedural Rules") for certificates of public convenience and necessity ("Certificate" or "CCN") seeking authorization from the Commission for SCSP to construct and Entergy Mississippi to acquire, own, operate, improve, and maintain a solar photovoltaic facility in Sunflower County, Mississippi ("Sunflower Solar Facility" or "Facility"). The Commission, having considered the Joint Petition and all evidence submitted, including all testimony and documents filed with the Commission and presented at hearing, and being fully advised in the premises, finds as follows:

## PROCEDURAL HISTORY

Entergy Mississippi filed the Joint Petition on December 20, 2018. In support of 1. the Joint Petition, SCSP filed as an Attachment the pre-filed Direct Testimony of Spivey J. Paup.

Entergy Mississippi filed as Attachments the pre-filed Direct Testimonies of Mary M. Decuir, Michael J. Goin, Phong D. Nguyen, and Allen A. Heard. The Joint Petition requested that the Commission grant CCNs to SCSP to construct the Sunflower Solar Facility and to EML to thereafter acquire, own, operate, improve and maintain the Facility.

- 2. 25x'25 Initiative ("25x'25") filed a request to intervene, and that request was granted on January 18, 2019. On May 30, 2019, the Commission issued a Scheduling Order in this proceeding establishing procedures for the timely resolution of this matter, including establishing discovery deadlines, deadlines for the filing of testimony, and setting this matter for hearing at the Commission's September 2019 Open Meeting. On September 9, 2019, the Commission entered an order cancelling the hearing scheduled for the September 2019 Open Meeting. On December 23, 2019, 25x'25 Initiative moved to withdraw its intervention, and that request was granted on January 3, 2020. Each party had a full opportunity to file testimony and engage in discovery in the period established by the Scheduling Order issued in this proceeding.
- 3. Notice of the matter was given as required by law by publication in both *The Clarion-Ledger*, being a newspaper of general circulation published in Jackson, Mississippi, on December 29, 2018, and *The Enterprise-Tocsin*, being a newspaper of general circulation published in Sunflower County, Mississippi, on December 27, 2018. Notice was also mailed to each "interested person" as defined in Procedural Rule 2.115 and to each public utility that may be affected by an order resulting from the Joint Petition and hearing, said notice having been in strict compliance with the law and having been, in the judgment of the Commission, such reasonable notice to all persons interested therein as is necessary under the law and under the rules and regulations of the Commission.

- 4. The Mississippi Public Utilities Staff ("Staff") and 25x'25 propounded Data Requests to Entergy Mississippi and SCSP on June 13, 2019, and Entergy Mississippi and SCSP responded thereto.
- 5. The Staff engaged the services of Bates White, LLC ("Bates White"), an economic consulting firm, to review and assist in the Staff's investigation of the Joint Petition.

  Bates White contracted with MERIT SI LLC ("MERIT SI") to provide an independent assessment of the technical specifications and warranty terms of the BOT Agreement.
- 6. On August 21, 2019, the Staff's consultant, Bates White, filed its Direct Testimony and accompanying Report in this proceeding.
- 7. On August 29, 2019, Entergy Mississippi filed its Rebuttal Testimony in this proceeding.
- 8. On March 4, 2020, Entergy Mississippi filed its Supplemental Rebuttal Testimony in this proceeding. In the Supplemental Rebuttal testimony, to address questions and observations raised by Bates White, EML proposed an alternative ownership structure for the Facility, in which the Company would seek to form a partnership with an unaffiliated equity investor and have the partnership step into EML's position under the BOT Agreement and acquire the Facility, which would benefit EML's customers through improved project benefits.
- 9. On March 12, 2020, Bates White filed its Supplemental Reply Testimony and exhibits in this proceeding.
- 10. On March 17, 2020, the Commission, in response to the COVID-19 pandemic, held a telephonic public hearing to consider the Joint Petition at which witnesses who pre-filed

testimony appeared and were available for questioning by the Staff and the Commission. SCSP witness, Mr. Spivey Paup, was excused from participation in the public hearing.

11. The Commission established a 10-day public comment period from the date of the hearing to allow submission of written comments from the public.

# JURISDICTION AND SUFFICIENCY OF THE FILING

12. The Commission finds that the Joint Petition, all pleadings, testimony, data, documentation, and exhibits in this Docket filed by Entergy Mississippi and SCSP comply with the statutory filing requirements and the requirements of the Commission's Procedural Rules, subject to the Petitioners' request for waiver. The Petitioners attached to, addressed in, or incorporated by reference into the Petition, all the information required by Appendix A, Schedule 3 of the Procedural Rules, except for part of the requirements of Appendix A, Schedule 3, Item 7, for which the Petitioners requested a Procedural Rule waiver. The Commission finds that good cause exists and has been shown for a temporary waiver of plans and specifications. The Commission further finds that it has jurisdiction over the parties and the matters addressed in the Joint Petition, as well as over the relief requested.

## FINDINGS AND CONCLUSIONS

- 13. The Sunflower Solar Facility is an approximately 100 megawatt ("MW") to-be-constructed solar photovoltaic facility located in Sunflower County near the City of Ruleville, Mississippi. The facility is a "greenfield" project to be developed by SCSP. The Facility is expected to occupy approximately 1,000 acres.
  - 14. In the Joint Petition, Entergy Mississippi proposed to acquire the Sunflower Solar

Facility pursuant to the terms of a Build-Own-Transfer Acquisition Agreement ("BOT Agreement") among Entergy Mississippi, SCSP, and (for limited purposes) Canadian Solar, Inc. ("CSI"). SCSP is a sub-subsidiary of Recurrent Energy, LLC ("Recurrent Energy"), which has been in existence since 2006. Based in the United States, Recurrent Energy is a leading utility-scale solar project developer delivering competitive, clean electricity to large energy buyers. Recurrent Energy functions as the United States project development arm of CSI. CSI, Recurrent Energy's ultimate parent company<sup>2</sup>, is one of the world's largest solar power companies. CSI is a leading manufacturer of solar photovoltaic modules and provider of solar energy solutions, and it has a geographically-diversified pipeline of utility-scale power projects. CSI has been publicly listed on NASDAQ since 2006.

- 15. Following a competitive solicitation process and selection of the most economic, qualifying proposal, on October 24, 2018, Entergy Mississippi, SCSP, and (for limited purposes) CSI entered into the BOT Agreement, under which SCSP would construct the Sunflower Solar Facility and then transfer ownership of the Facility to Entergy Mississippi. Acquisition of a solar resource via a Power Purchase Agreement mechanism was not considered as part of this solicitation process.
- 16. SCSP's responsibilities under the BOT Agreement include procurement of the equipment, systems, and other assets that will constitute the Facility, engaging contractors,

<sup>&</sup>lt;sup>1</sup> SCSP is a wholly-owned subsidiary of Recurrent Energy Development Holdings, LLC, which, in turn, is a wholly-owned subsidiary of Recurrent Energy.

<sup>&</sup>lt;sup>2</sup> Recurrent Energy is a wholly-owned, indirect subsidiary of CSI. Specifically, Recurrent Energy is a wholly-owned subsidiary of Recurrent Energy Group, Inc., which is a wholly-owned subsidiary of Canadian Solar UK Projects Ltd., which is a wholly-owned subsidiary of Canadian Solar Energy Holding Company Limited, which is a wholly-owned subsidiary of CSI.

including an engineering, procurement and construction ("EPC") contractor, and managing the work of relevant contractors who will carry out the construction of the Facility.

- 17. Under the BOT Agreement, as originally proposed in the Joint Petition, once certain conditions were satisfied, the Facility was expected to be acquired by and conveyed to Entergy Mississippi. Pursuant to the alternative ownership structure proposed by EML in its supplemental rebuttal testimony, EML is expected to form a partnership with an unaffiliated equity investor. EML will then assign its rights and obligations under the BOT Agreement to the partnership, and the partnership will then acquire the Facility under the BOT Agreement. After acquisition of the Facility, SCSP would continue to be responsible for causing the Facility to achieve final completion.
- 18. Under the BOT Agreement, the estimated purchase price for the acquisition is \$138.4 million, subject to adjustments. The estimated total dollar investment to acquire the Sunflower Solar Facility and related assets is approximately \$153.2 million. In addition to the estimated \$138.4 million total purchase price (which assumes a purchase price based on an approximate 100 MW acquisition), approximately \$14.9 million is estimated for transaction costs (including regulatory costs), construction oversight costs, contingency, and other costs. No additional investment in transmission upgrades will be necessary to connect to EML's transmission system.
- 19. Mr. Paup testified in his pre-filed Direct Testimony that as of that time, Recurrent Energy has developed, constructed, and/or brought to operation 2.3 gigawatts of solar projects in the United States and currently maintains a project development pipeline of five additional gigawatts across the United States. Recurrent Energy has brought to commercial operation

several solar energy projects that are approximately the same size as (or larger than) the proposed Facility. The majority of these projects involved similar photovoltaic technology and solar tracking equipment as that which will be used in the construction of the proposed Facility.

- 20. Ms. Decuir testified in her pre-filed Direct Testimony that the acquisition of the Sunflower Solar Facility builds upon the success of EML's Bright Future solar project (a 1.5 MW utility-scale pilot study that was completed in 2017), and that the Sunflower Solar Facility would add diversity to EML's generation portfolio and is an emission-free renewable resource that was obtained through a competitive solicitation. The Company has provided testimony that the geographic location of the Facility is well-suited for meeting EML's customers' long-term energy needs, and it would be the first large-scale, utility-owned solar project constructed in Mississippi, contributing to the approximately 242 MW of existing solar capacity in the State. The Sunflower Solar Facility also should be capable of supporting a moderately-sized community solar program in the future.
- 21. Mr. Goin testified in his pre-filed Direct Testimony that the build-own-transfer structure of the BOT Agreement protects EML's customers' interests by making the SCSP responsible for the successful development and construction of the Facility. The BOT structure (1) reduces EML's overall project risk, including development, construction, and permitting, and (2) enhances EML's experience with solar project development, construction, and operation by allowing EML to benefit from the experience of SCSP's owner. EML did not believe the more common approach in which EML would retain an EPC contractor and be in charge of construction would be appropriate for this project. Rather, EML determined that its customers were best protected by shifting the construction risk of a large solar project, in which it and

Entergy Services, LLC ("ESL")<sup>3</sup> have limited experience, to the project developer. The use of a BOT structure allows the Facility to be built by an organization with experience developing large solar projects, and it also affords EML an opportunity to learn from the development of this project.

- 22. Mr. Nguyen testified in his pre-filed Direct Testimony that an economic analysis performed under his direction supports EML's purchase of the Sunflower Solar Facility and demonstrates that the Sunflower Solar Facility is the most economic solar resource selected from the competitive solicitation. Further, the Sunflower Solar Facility is expected to provide capacity, energy, and risk mitigation benefits for EML customers. The Sunflower Solar Facility will also provide economic development benefits that are not specifically quantified in the traditional economic analysis. The construction of the resource will bring economic development and jobs for the local community.
- 23. Mr. Heard testified in his pre-filed Direct Testimony that because Entergy Mississippi is making such a sizeable investment for the benefit of its customers, it is necessary for EML to receive timely cost recovery. For that reason, Entergy Mississippi proposes to include the Annual Capacity Costs for the Sunflower Solar Facility in EML's FRP through the interim capacity mechanism approved by the Commission in Docket 2018-UN-205.
- 24. The Staff's consultant, Bates White, takes the position that the BOT ownership model proposed by Entergy Mississippi presents higher costs and more operational risk than

<sup>&</sup>lt;sup>3</sup> ESL is an affiliate of the Entergy Operating Companies that provides engineering, planning, accounting, legal, technical, regulatory, and other administrative support services to each of the Entergy Operating Companies. The Entergy Operating Companies are Entergy Mississippi, Entergy Texas, Inc., Entergy Louisiana, LLC, Entergy Arkansas, LLC, and Entergy New Orleans, LLC.

would a power purchase agreement ("PPA") deal structure. Bates White conceded that the BOT Agreement mitigates certain risks associated with PPAs. Bates White recommended in its report that Entergy Mississippi seek a broader array of offers, including PPAs, in its future renewable solicitations. Bates White also recommended that the Commission should condition approval of the Joint Petition on EML obtaining minimum generation guarantees on the output from the Sunflower Solar Facility over at least 20 years following the Facility's commercial operation date, and that the Commission require EML to bear ultimate responsibility for such minimum performance in the event that EML is unable to enforce such guarantees.

- 25. Mr. Ngyuen testified in his pre-filed Rebuttal Testimony that based on corrections to the calculation of property taxes applicable to EML's ownership of the Facility and updating the estimated fixed operation and maintenance costs in the economic evaluation of the Facility, the revised economic analysis showed the economics of acquisition of the Facility improved and acquisition under the BOT Agreement is expected to yield a positive net benefit for customers of approximately \$4 million on a net present value ("NPV") basis. Mr. Nguyen also estimated the value of fuel diversity provided by the Facility which further increases the net benefit for customers. Bates White agreed in its report that fuel diversity would mitigate against the effects of natural gas price volatility.
- 26. Mr. Goin testified in his pre-filed Rebuttal Testimony that in determining that the BOT structure was the better long-term option for EML customers, EML sought to properly balance the risks and costs involved. He explained that although PPAs may offer lower short-term costs, they also bring long-term risk to be borne by customers. PPA terms can limit EML's ability to react to changes in the market, technology, operating costs and regulatory

environments, among other future unknown conditions. Under a BOT structure, EML will have the flexibility and optionality to respond to such scenarios. Therefore, because a BOT structure can mitigate future risk that materializes, it can be a better option for customers. Mr. Goin notes that the balancing of risk and cost is an ongoing continuous process for EML, making it important for the Company to include a variety of resources in its generation portfolio that can mitigate potential future risks in different ways. Both ownership and control as well as use of different fuel sources help mitigate these future risks. EML's balancing of costs and long-term risk led it to conclude that the BOT structure for the Facility is a reasonable way to reliably meet its customers' long-term power needs.

- Agreement does not unreasonably shift operational costs to EML customers. The terms of the BOT Agreement provide significant protection for EML customers, including detailed and specific design, equipment and engineering parameters for the Facility developed in coordination with the Company's engineering consultant; a fixed purchase price with the developer bearing the risk of cost overruns, construction delays and damaged or defective equipment; staggered purchase price payments based on defined milestones and liquidated damages for extended delays; verification of the Facility's generating capacity by performance testing and adjustment to the purchase price if the Facility cannot reach guaranteed capacity; extensive and comprehensive equipment and project warranties; and long-term price certainty to mitigate against potential increases in future supply costs.
- 28. Ms. Decuir testified in her pre-filed Rebuttal Testimony that EML's Integrated Resource Planning anticipated the integration of a solar generation resource in the near term to

address capacity need and increase supply diversity, helping to mitigate risks of unexpected future cost increases. Therefore, EML conducted a solicitation of solar developments already in the MISO interconnection queue and located in EML's load zone as a way to mitigate risks associated with timing considerations. By doing so, EML sought to ensure that the full ITC could be realized and to increase capacity in EML's load zone, thereby mitigating risk to EML customers of capacity price increases.

- 29. Mr. Goin testified in his pre-filed Supplemental Rebuttal Testimony that EML continued to explore other options to structure the acquisition of the Facility that would address Bates White's concerns regarding the customer cost impacts of the BOT Agreement and that would create additional benefits for EML customers in addition to those of the ownership model. In that regard, EML proposes to enter into a partnership agreement with an unaffiliated equity investor and have the partnership purchase, own and operate the Facility. Under this partnership arrangement, the third-party investor can capture the full value of the federal Investment Tax Credit ("ITC") available for the development of the Facility, in exchange for a substantive capital investment in the Sunflower Solar Facility. A main driver of the economics of a solar PPA relative to utility ownership of a solar project is the value of the federal ITC for the project. EML's partnership proposal for ownership of the Facility will allow EML's customers to recognize the ITC value in the same manner as a PPA developer and still retain the long-term benefits of facility ownership.
- 30. Under the partnership structure, besides being allocated most of the ITCs, the unaffiliated investor will receive a share of the cash flows generated from selling wholesale capacity, energy and ancillary services from the Facility into the MISO markets. EML's share

of the cash flows from MISO transactions and renewable energy certificates will be greater than its capital investment (by percentage) and will increase significantly once the investor realizes its negotiated rate of return on its capital investment. At that time EML will have the option, but not the obligation, to buy the unaffiliated investor's residual interest in the partnership at its then fair market value, thus acquiring sole ownership of the Facility.

- 31. Mr. Goin also testified in his pre-filed Supplemental Rebuttal Testimony that there will be a hedge arrangement between EML and the unaffiliated investor as part of the partnership structure. The hedge arrangement will benefit EML customers by providing them with 100% of the MISO locational margin price ("LMP") revenues for the entirety of the Facility and capacity benefits located close to EML's load. To the extent LMPs in the MISO market are higher than the agreed fixed price in the hedge, EML's customers will realize the benefit of that difference.
- 32. The hedge arrangement is a required condition of the partnership agreement for the unaffiliated investor to make the capital investment in the Facility and thus provide EML customers with the expected resulting net benefits. The hedge arrangement will not allocate any cash to Entergy Corporation or its shareholders.
- 33. Finally, Mr. Goin testified in his pre-filed Supplemental Rebuttal Testimony that EML cannot convert the BOT Agreement to a PPA given the BOT Agreement's April 24, 2020 deadline for providing SCSP with a final notice to proceed to construction of the Facility and SCSP's ability to terminate the BOT Agreement if the deadline is not met. Mr. Goin states that EML would be unable to negotiate and reach agreement on commercial terms on a PPA in such a short time frame. Further, EML has no current PPA pricing information with which to compare

any PPA pricing SCSP may offer. However, if the Joint Petition is approved, EML stated it would commit to include PPA offers as one of the resource options requested in its next renewable generation solicitation.

- 34. Mr. Ngyuen stated in his pre-filed Supplemental Rebuttal Testimony that under the alternative partnership ownership structure, the majority of the value of the ITC can be utilized immediately by the investor. This structure enables EML to reduce its capital investment for acquisition of the project by an amount that reflects the unaffiliated partner's ability to utilize the ITC in the near term. Therefore, EML customers realize the considerable economic benefit of the ITC as soon as the acquisition occurs through a reduced rate base, instead of only realizing 1/30<sup>th</sup> of the value each year.
- 35. In EML's Economic Evaluation Model with Partnership Structure performed under Mr. Nguyen's supervision and described in his supplemental rebuttal testimony, EML's capital contribution is reduced to account for the equity investor's capital contribution, and that reduced capital investment is included in rate base and recovered from EML customers through rates. The lower capital costs resulting from the partnership structure significantly reduces the total overall cost of the Facility to EML customers throughout its 30-year anticipated life. Based on the Economic Evaluation Model with Partnership Structure workpapers provided to the Public Utilities Staff on March 23, 2020, acquisition and operation of the Sunflower Solar Facility through the proposed partnership structure is expected to yield net benefits of approximately \$25 million NPV to EML customers over the life of the Facility.
- 36. Mr. Heard stated in his pre-filed Supplemental Rebuttal Testimony that for the original BOT Agreement under which EML would provide all the capital investment for the

acquisition, the full \$153.2 million acquisition cost was the estimated first year's rate base for the Sunflower Solar Facility. However, under the partnership structure, the unaffiliated investor would provide a substantial portion of the capital investment necessary for the partnership to acquire the Facility, and EML seeks to have the partnership treated as a pass-through entity for rate-making and prudence review purposes. Therefore, EML proposes to include in its rate base for the first year only its share of the partnership investment. With that reduction in rate base, Mr. Heard testified that the first-year's non-fuel revenue requirement for the Sunflower Solar Facility is now estimated to be \$9.1 million, which is \$9.9 million lower than estimated by EML for the original BOT acquisition structure.

- 37. Under the partnership structure for Facility ownership, Mr. Heard testified that a typical residential customer using 1,000 KWh per month would see an increase in rates of approximately \$.76 per month through Schedule FRP-7, or approximately 0.7% in the first year of the Facility's operation. After applying the effects of all other riders, including a \$.10 per month credit in Schedule PMR relating to hedge settlements, a residential customer using 1,000 KWh per month would see a net increase in rates of approximately \$.66 per month.
- 38. EML witness Patrick Stack testified in his pre-filed Supplemental Rebuttal Testimony that under Generally Accepted Accounting Principles, EML will be required to recognize its share of the partnership income based on the Hypothetical Liquidation at Book Value (HLBV) method, which is the industry standard for accounting for the partnership structure proposed by EML based on the disproportionate allocation between the partners of ITCs and other tax benefits and income and cash distributions from the partnership. Accounting

for EML's share of the partnership's income under the HLBV method would result in EML's investment in the partnership included in rate base likely exceeding its invested capital.

- 39. Mr. Stack also explained in his pre-filed Supplemental Rebuttal Testimony that EML will account for the hedge arrangement as a derivative, recording either an asset or liability based on the fair value of the hedge at the end of each reporting period, i.e. the mark-to-market adjustment. The asset or liability balance will be fully offset by a regulatory liability or asset, as appropriate, and amounts received or paid through the hedge settlement will be recognized as reduction or increases in purchased power expense. This accounting treatment is similar to that applied to EML's existing hedge arrangements related to natural gas purchases.
- 40. Mr. Stack testified that the partnership will also have to account for the mark-to-market adjustment each reporting period for the hedge arrangement. Unlike EML, the partnership will not be able to offset the asset or liability recognized for the hedge with a regulatory liability or asset. Therefore, the partnership will recognize gains and losses each period from the mark-to-market adjustment, which will affect the share of partnership income recognized by EML.
- 41. In his pre-filed Supplemental Rebuttal Testimony, Mr. Heard proposes a ratemaking adjustment to the partnership income recognized by EML under the HLBV method. Specifically, he proposes an adjustment to EML's investment in partnership balance with a corresponding adjustment to the income recognized from the partnership. This adjustment would better align EML's investment in partnership balance with EML's cash flows provided to and received from the partnership, removing the non-economic effects of the HLBV accounting

on EML's rate base and making changes in EML's investment in partnership more predictable over time as it declines over the useful life of the Facility, similar to the effects of depreciation.

- 42. Mr. Heard also proposes a ratemaking adjustment to the income EML recognizes from the partnership for its share of the mark-to-market gain or loss recognized by the partnership, with a corresponding adjustment to its investment in partnership balance. This adjustment will better align EML's investment in partnership balance with the cash flows it receives from and contributes to the partnership.
- 43. The Commission finds that the Sunflower Solar Facility provides an opportunity to address EML's current capacity needs and will contribute to the continued efforts of developing a portfolio of diverse generating technologies and fuel sources in addition to supporting the integration of renewable generation.
- 44. The Commission finds that the Facility diversifies and balances EML's resource portfolio, thereby mitigating the risk to EML customers of future significant and unexpected fuel price increases. The diversity in EML's owned generation portfolio provided by ownership of the Facility will mitigate the risk to EML customers of fluctuations in cost, availability and disruptions associated with particular fuel sources or delivery channels.
- 45. The Commission finds that under the current circumstances ownership of the Facility under the BOT Agreement is likely to mitigate longer-term risks to EML customers through long-term price certainty combined with the flexibility and option to respond to unexpected changes in supply conditions, market rules and economics, regulatory environments, and technology by expanding, upgrading or modifying the Facility to include the potential addition of battery storage, extending its life through additional investment, deactivating or

retiring the facility, and modifying operational controls, production levels and maintenance details. Additionally, while a PPA structure may be reasonable in the future, ownership of the Sunflower Facility by EML at this time will ensure that any future cost savings resulting from lower operation and maintenance expenses will be passed on to EML customers through rates.

- 46. The Commission further finds that the BOT Agreement mitigates risks to EML customers associated with ownership of the Facility through;
- a. an Owner's Engineer that will assist the Project Manager and Solar Manager ensure that SCSP adheres to the Scope Book;
- b. fixed purchase price with the developer bearing the risk of cost overruns, construction delays and damaged or defective equipment;
  - c. staggered purchase price payments based on defined milestones;
  - d. performance testing of the Facility's generating capacity;
  - e. price adjustments if the Facility's capacity does not meet guaranteed capacity;
- f. liquidated damages for delays in project completion; protection from cost overruns, construction delays and damaged/defective equipment;
  - g. and project and equipment warranties.
- 47. The Commission also finds that if the Sunflower Facility was expected to produce greater customer benefits, the Commission would have greater confidence that the acquisition was very likely to produce benefits for customers and could approve the acquisition without the conditions contained in this order. In other words, due to the relatively smaller NPV benefits of the Sunflower Facility than has been associated with other generating facility acquisitions by EML, if actual fuel, energy and other anticipated benefit drivers are materially different than

expected, there is a greater risk that customer benefits may not fully materialize. This was not the case with EML's other generation acquisitions, which each provided more substantial expected customer benefits. Even in this case, however, the Facility is in the public interest, given the increased fuel diversity and risk mitigation opportunities the Project offers, along with additional concessions proposed by EML which provide greater customer benefits. For this reason, the Commission approvals in this Order are conditioned upon the following:

- a. that EML pursue a tax equity partnership structure for the acquisition of the Facility by the partnership under the BOT agreement. The tax equity partnership proposal provides additional protection to EML customers. Under the partnership proposal, the risk is diversified between EML and the investor because they will share the costs of owning, operating and maintaining the Facility. Therefore, the Commission finds that EML's pursuit of a partnership structure and tax equity financing for the acquisition of the Facility by the partnership under the BOT agreement is reasonable and in the public interest.
- b. that, in the event Entergy Mississippi does not consummate the partnership structure under terms expected to result in economic benefits comparable to those estimated in EML's Economic Evaluation Model with Partnership Structure, the total costs associated with the acquisition of the Facility recoverable from Entergy Mississippi customers shall not exceed \$136 million, provided however, that such cost recovery cap shall not apply if there is a change in tax law that would cause the partnership structure to be unable to provide the estimated economic benefits.
- c. that if EML determines at the time the purchase option becomes available under a partnership arrangement that it would benefit EML customers for the Company to obtain sole

ownership of the partnership or the Facility, EML must file a petition with the Commission seeking authorization to exercise the option. The petition should explain the details of the proposed transaction, including the final price and how it was determined, the benefits EML customers would realize as a result of the transaction, and how EML proposes to exercise the option.

- d. that EML maintain an annual availability factor consistent with the provisions of confidential Attachment A to this Order. Consistent with EML's testimony touting the benefits of utility ownership, a minimum annual availability factor will ensure this asset is available to provide energy to the electric grid. This condition is appropriate for this project given that this is the first large-scale utility-owned solar facility in Mississippi. The Commission finds that should the Sunflower Solar Facility availability factor fall below that required in this order, there will be a rebuttable presumption of imprudence associated with the operation of the facility.
- e. that EML include PPA offers as one of the resource options requested in EML's next renewable resource solicitation.
- 48. As stated above, the Commission finds that EML's pursuit of a tax equity partnership structure for the acquisition of the Facility by the partnership under the BOT agreement is reasonable and in the public interest. In addition, certain FERC approvals are also necessary for the partnership to come to fruition. Therefore, the Commission will support through intervention or other appropriate means, the FERC orders and waivers required for the partnership structure to produce the benefits described in EML's testimony.
- 49. With the finding that the partnership structure satisfies the public interest, the Commission makes certain other findings related to the partnership and addressing appropriate

ratemaking adjustments.

- 50. The use of a partnership structure as proposed by EML is a common form of financing for the acquisition of utility-scale solar generation projects such as the Sunflower Solar Facility. Under EML's proposal, the form of the business entity will be a limited liability company that will be treated as a partnership for federal income tax purposes.
- 51. Under the partnership structure proposed by EML, the Company will be the majority partner and the unaffiliated investor will be the minority partner for purposes of day-to-day control of the Facility, and EML will assume full responsibility for the prudent operation and maintenance of the Facility. The Commission finds that if Entergy Mississippi proceeds under the tax equity partnership structure, Entergy Mississippi's total investment to acquire the Sunflower Solar Facility is reasonable and should be allowed to be recovered through the Company's rates, subject to review that such cost were prudently incurred.
- 52. The Commission finds the hedge arrangement that will be part of the partnership structure would be made for the benefit of EML's retail customers.
- 53. The Commission authorizes EML to recover the Facility's first-year non-fuel revenue requirement through Schedule FRP-7 (Revised) Interim Capacity Rate Adjustments. No later than six months prior to the proposed effective date of the Interim Capacity Rate Adjustments, EML will provide the MPUS with an updated revenue requirement and proposed Interim Capacity Rate Adjustments to be billed under FRP-7 (Revised). The Company also shall provide notice to its customers of such updated Interim Capacity Rate Adjustments prior to their effective date.

- 54. The Commission finds that certain ratemaking adjustments are necessary and appropriate so that EML's investment in partnership balance properly represents EML's investment in the Facility, which is expected to decline in a steady and predictable manner over the useful life of the Facility at a rate similar to the depreciation rate of the Facility, and so that EML customers will receive the full benefit of EML's investment in the partnership without the non-cash effects resulting from the application of the HLBV accounting method and the partnership's mark-to-market adjustments. These adjustments will also afford EML a reasonable opportunity to recover potentially volatile costs (*i.e.* financial hedge settlements) over which it has little control given the influence of fluctuating MISO energy prices on such costs. Therefore, the Commission finds that the following adjustments are reasonable and appropriate and should be allowed for rate making purposes for the Sunflower Facility:
- a. The Commission approves the inclusion of EML's investment in the partnership in rate base for ratemaking purposes, based on the criteria set forth in Miss. Code 77-3-43, as well as changes in its partnership investment over time that the Commission finds to be reasonable. Pursuant to an agreement with the partnership, EML or its service company affiliate, ESL, shall operate the Sunflower Facility on behalf of the partnership arrangement, and shall be subject to prudence review for its operation of the Facility.
- b. The Commission authorizes EML, for rate making purposes, to make adjustments for the difference between its share of the partnership's income recognized under the HLBV method of accounting, and the amount of income distributed to it under the partnership agreement. EML is also authorized, for rate making purposes, to make adjustments to eliminate its share of the partnership income or loss attributable to the partnership's mark-to-market

adjustment for the hedge arrangement between the partnership and EML. These adjustments for rate making purposes will be implemented through adjustments to EML's investment in partnership balance with corresponding adjustments to EML's income from the partnership. Combined, they will ensure that EML's investment in partnership balance and income from the partnership recognized for rate making purposes are consistent with its invested capital as well as the cash flows provided to and received from the partnership.<sup>4</sup>

- c. The Commission authorizes EML to credit or recover the income recognized from the partnership (after the adjustments for the HLBV accounting method and mark-to-market adjustments, as described herein) through EML's Power Management Rider ("Schedule PMR").
- d. The Commission authorizes EML to recognize amounts received by EML, or paid by EML for settlements under the hedge arrangement with the partnership as reductions or increases in purchase power expense in FERC account 555. The Commission further authorizes EML to credit to or recover from customers through the PMR rider the reduction or increase in purchased power expenses recorded in connection with hedge settlements.
- e. The Commission authorizes EML to exclude from rate base the asset or liability recorded based on the fair value of the hedge arrangement at the end of each reporting period, as well as the offsetting regulatory liability or asset.
- 55. The Commission grants the Petitioners permission for deviation from and does waive the Procedural Rule requirements referenced herein in and in Paragraphs 24(g) and 25 of the Petition. The Commission finds that good cause exists and has been shown for a temporary

<sup>&</sup>lt;sup>4</sup> The Company's Exhibit PJS-SR-1 provided illustrative journal entries demonstrating these adjustments.

waiver of plans and specifications, but orders Petitioners to make available for review by Staff and Commission the engineering plans and specifications once completed.

- 56. Entergy Mississippi is an electric public utility as defined in Miss. Code Ann. § 77-3-3(d)(i). The Commission finds that SCSP is not a public utility under the laws of the State of Mississippi, nor is SCSP authorized to operate as a public utility.
- 57. The Commission has ascertained that all labor, materials, property, and services to be rendered for the above-described improvements will be supplied at competitive and reasonable prices.
- 58. The Commission finds that subject to the receipt of necessary regulatory approvals, including satisfaction or waiver of all closing conditions and receipt of final corporate governance approvals, SCSP is ready, willing, and able to construct and Entergy Mississippi is ready, willing, and able to acquire, own, operate, improve and maintain the Sunflower Solar Facility, and further finds that, the public convenience and necessity require and will require the issuance by this Commission of certificates of public convenience and necessity authorizing such construction, acquisition, ownership, operation, improvement and maintenance of the Sunflower Solar Facility.
- 59. The Commission finds that, subject to the conditions above, the public convenience and necessity requires and will require construction by SCSP and the acquisition, ownership, operation, improvement, and maintenance of the Sunflower Solar Facility located in Sunflower County, Mississippi by Entergy Mississippi under the BOT Agreement. The Commission further finds that the public convenience and necessity will be served by EML

pursuing a partnership arrangement that will further enhance customer benefits of the Sunflower Facility, as previously set out in this Order.

# IT IS THEREFORE ORDERED by the Commission that:

- 1. The Commission hereby does grant unto the SCSP a certificate that the public convenience and necessity require and will require that the SCSP construct the Sunflower Facility and grant unto Entergy Mississippi, subject to the Conditions above, a certificate that the public convenience and necessity require and will require that EML acquire, own, operate, improve, and maintain, in accordance with the terms of the BOT Agreement, the Sunflower Solar Facility and other related equipment, property, improvements, and facilities in Sunflower County, all within the State of Mississippi and as particularly described herein, and described, set out, and applied for in the Joint Petition, in EML's testimony and in this Order.
- 2. The Commission hereby approves Entergy Mississippi's total investment to acquire the Sunflower Facility, subject to the conditions herein, and authorizes EML to reflect such costs in EML's rates. The Commission further orders that the BOT Agreement is prudent and consistent with the public interest.
- 3. The Commission orders EML to pursue an agreement with the unaffiliated investor on the terms and conditions of the partnership arrangement described in EML's testimony in this proceeding, including the terms of the financial hedge, and to make a compliance filing with the Commission with respect to such efforts. EML must demonstrate through this filing that the partnership agreement will result in benefits to EML customers that are comparable to those set forth in the Economic Evaluation Model with Partnership Structure or explain why no such partnership arrangement was commercially viable.

- 4. The Commission orders that the total costs associated with the acquisition of the Facility recoverable from Entergy Mississippi customers shall not exceed \$136 million. However, the Commission orders that this cost recovery cap shall not apply if there is a change in tax law that would cause the partnership structure to be unable to provide the expected level of economic benefits described in EML's testimony.
- 5. The Commission hereby orders an annual depreciation rate of 3.67% as the rate of depreciation for the Sunflower Solar Facility at this time. Nothing herein precludes the Company or Staff from proposing a different depreciation rate for the Sunflower Solar Facility in the future based upon a properly conducted depreciation study.
- 6. The Commission hereby orders that EML is authorized to recover the Facility's first-year non-fuel revenue requirement through Schedule FRP-7 (Revised) Interim Capacity Rate Adjustments. The Commission further orders that no later than six months prior to the proposed effective date of the Interim Capacity Rate Adjustments, EML shall provide the MPUS with an updated revenue requirement and proposed Interim Capacity Rate Adjustments to be billed under FRP-7 (Revised). The Commission further orders that the Company also shall provide notice to its customers of such updated Interim Capacity Rate Adjustments prior to their effective date.
- 7. The Commission orders that certain ratemaking adjustments are necessary and appropriate so that EML's investment in partnership balance properly represents EML's investment in the Facility, which is expected to decline in a steady and predictable manner over the useful life of the Facility at a rate similar to the depreciation rate of the Facility, and so that EML customers will receive the full benefit of EML's investment in the partnership without the

non-cash effects resulting from the application of the HLBV accounting method and the partnership's mark-to-market adjustments. The Commission further orders that the following adjustments are reasonable and appropriate and shall be allowed for rate making purposes for the Sunflower Facility:

- a. The Commission orders that EML's investment in the partnership shall be included in rate base for ratemaking purposes, based on the criteria set forth in Miss. Code 77-3-43, as well as changes in its partnership investment over time that the Commission finds to be reasonable. The Commission further orders that, because EML shall be responsible (directly or through an agent) for operating the Sunflower Facility on behalf of the partnership arrangement, EML shall be subject to prudence review for its operation of the Facility.
- b. The Commission orders that, for rate making purposes, EML hereby is authorized to make adjustments for the difference between its share of the partnership's income recognized under the HLBV method of accounting, and the amount of income distributed to it under the partnership agreement. EML is also authorized, for rate making purposes, to make adjustments to eliminate its share of the partnership income or loss attributable to the partnership's mark-to-market adjustment for the hedge arrangement between the partnership and EML. The Commission further orders that these adjustments for rate making purposes will be implemented through adjustments to EML's investment in partnership balance with corresponding adjustments to EML's income from the partnership, and that combined, they will ensure that EML's investment in partnership balance and income from the partnership recognized for rate making purposes are consistent with its invested capital as well as the cash flows provided to and received from the partnership.

- c. The Commission orders that EML is authorized to credit or recover the income recognized from the partnership (after the adjustments for the HLBV accounting method and mark-to-market adjustments, as described above) through EML's Power Management Rider ("Schedule PMR").
- d. The Commission orders that EML is authorized to recognize amounts received by EML, or paid by EML for settlements under the hedge arrangement with the partnership as reductions or increases in purchase power expense in FERC account 555. The Commission further orders that EML is authorized to credit to or recover from customers through the PMR rider the reduction or increase in purchased power expenses recorded in connection with hedge settlements.
- e. The Commission orders that EML is authorized to exclude from rate base the asset or liability recorded based on the fair value of the hedge arrangement at the end of each reporting period, as well as the offsetting regulatory liability or asset.
- 8. The Commission orders that EML shall maintain an annual availability factor consistent with the provisions of confidential Attachment A to this Order. The Commission orders that should the Sunflower Solar Facility availability factor fall below that required in this order, there shall be a rebuttable presumption of imprudence associated with the operation of the Sunflower Facility.
- 9. The Commission orders that EML shall include PPA offers as one of the resource options requested in EML's next renewable resource solicitation.
- 10. Pursuant to Section 77-3-14(5) of the Mississippi Code, the Commission orders that Entergy Mississippi shall submit quarterly progress reports to the Commission and Staff

during construction of the project. The quarterly progress reports shall include any deviations or variances in the project scope, cost estimate, and any other significant items that may affect the ability to complete the project on schedule and within the approved cost estimate and provide sufficient information regarding costs incurred on the project to allow the Commission and Staff to adequately monitor the status and progress of the project. The first quarterly progress report shall be submitted by October 1 and filed quarterly thereafter.

11. This Order shall be in full force and effect from and after the date of its Entry and shall be deemed issued on the day it is served on the parties herein by the Executive Secretary of the Commission who shall note the service date in the file of this Docket.

## **COMMISSION VOTE**

Chairman Dane Maxwell voted:

AYE X , NAY ;

Com	missioner Brent Bailey voted:	AYE_X, NAY;
Com	missioner Brandon Presley voted:	AYE_X, NAY
SO ORDERED, this the 14th day of April, 2020.		
MISSISSIPPI PUBLIC SERVICE COMMISSION		
/s/ Dane Maxwell <sup>5</sup>		
Dane Maxwell, Chairman		
	/s/ Bren	t Bailey

Brent Bailey, Commissioner

<sup>&</sup>lt;sup>5</sup> This Order was signed electronically due the remote work status of each Commissioner during the COVID-19 pandemic.

/s/ Brandon Presley		
Brandon Presley, Commissioner		

ATTEST: A True Copy

<u>/s/ Katherine Collier</u> Katherine Collier Executive Secretary

Effective this the 14th day of April, 2020.