

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSISSIPPI**

MISSISSIPPI PUBLIC SERVICE COMMISSION

DOCKET NO. 2021-AD-19

**IN RE: ORDER ESTABLISHING DOCKET TO REVIEW THE
EFFICACY AND FAIRNESS OF THE NET METERING AND
INTERCONNECTION RULES**

FINAL ORDER AMENDING RULES

COMES NOW, the Mississippi Public Service Commission ("Commission"), pursuant to its authority under the Mississippi Public Utility Act and applicable regulations and issues this Final Order amending the Mississippi Renewable Energy Net Metering Rule and the Mississippi Distributed Generator Interconnection Rule. For the reasons that follow, the Commission hereby adopts as final the Mississippi Distributed Generator Interconnection and Net Renewable Generation Rules attached hereto as Exhibit "A" (hereinafter referred to collectively as "Net Renewable Generation Rules").

I. Procedural Backdrop

The Commission incorporates and fully reasserts herein by reference the Procedural History section provided in the Commission's January 18, 2022 Order Inviting Final Written Comment and Setting Hearing on the proposed rule changes entered in this matter.¹ In accordance with that Order, the following ten (10)

¹ See Order Inviting Final Written Comment and Setting Hearing on the Proposed Rule Changes at pp. 2-3, Docket No. 2021-AD-19 (Jan. 18, 2022).

parties timely submitted written comments on the rule revisions proposed by the

Commission:

1. Solar Energy Industries Association (SEIA);
2. The Mississippi Solar Energy Society Chapter of the American Solar Energy Society (MSES/ASES);
3. Posigen, Inc.;
4. Gulf States Renewable Energy Industry Association (GSREIA);
5. Scenic Hill Solar, LLC;
6. Audubon Delta;
7. The Mississippi Public Utilities Staff;
8. Entergy Mississippi, LLC;
9. Mississippi Power Company; and
10. The Sierra Club²

The second round of written comments, while still divergent between utilities and solar interest groups on certain issues, were narrower in scope and showed amenability to many of the Commission's proposed changes. For instance, the interest groups supported a change from hard to soft participation caps, clarification on the treatment of battery storage, grandfathering provisions for the benefits adders, and expressing capacity limits in alternating current (AC) rather than direct current (DC).³ Multiple parties also expressed appreciation for the Commission's proposal of an upfront rebate program and increased opportunities for low-to-moderate income (LMI) customers.⁴ As SEIA stated, "The addition of an upfront rebate direct to the consumer is simple and will likely be effective in

² The Sierra Club's comments were joined by Audubon Delta, The Mississippi NAACP, Steps Coalition, 2C Mississippi, The City of Jackson, MS Solar Energy Society, and the Education, Economic, Environmental, Climate and Health Organization.

³ See, e.g., Feb. 15, 2022 Comments of Posigen, Inc. at p. 4. In contrast, both electric utilities advocated to keep the current hard three percent (3%) cap and references to direct current.

⁴ See, e.g., Feb. 15, 2022 SEIA Comments at pp. 4-5; Feb. 16, 2022 Sierra Club Comments at p. 4 ("A financial incentive for low and middle income DG customers is laudable and appropriate.").

increasing LMI customer adoption rates.”⁵ SEIA similarly noted that increasing eligibility for the LMI benefits adder to 250% of the federal poverty level “seems likely to spur adoption of rooftop solar in Mississippi for eligible Mississippi customers.”⁶

Nevertheless, the main areas of opposition from interest group stakeholders once again centered on energy pricing and customer compensation. While parties viewed a rebate program favorably, many requested that the rebate amounts be increased, and that eligibility be expanded beyond LMI customers.⁷ Stakeholders similarly requested expanded eligibility for meter aggregation⁸ and adjustment of the rule’s compensation provisions to account for inflation over the twenty-five (25) year grandfather periods.⁹

The most contentious issue, however, concerned the Commission’s directive that EML and MPC “include a fully-costed customer charge for residential customers in their next annual formula rate plan filing” to mitigate against cost-shifting caused by increased net metering participation.¹⁰ Sierra Club, for example, argued that such changes are unnecessary because participating DG customers “can also reduce fixed costs for delivery of service and provide other benefits to the

⁵ Feb. 15, 2022 SEIA Comments at p. 4.

⁶ *Id.* p. 5.

⁷ *See, e.g.*, Feb. 2022 Comments of Audubon Delta at p. 11; GSREIA at p. 1; SEIA at p. 9; and Sierra Club at p. 5.

⁸ *See, e.g.*, Feb. 2022 Comments of Audubon Delta at p. 22; Posigen, Inc. at p. 26; and Scenic Hill Solar at p. 3.

⁹ *See* Feb. 2022 Comments of Audubon Delta at p. 13.

¹⁰ Jan. 18, 2022 Order Inviting Final Written Comment and Setting Hearing on the Proposed Rule Changes at p. 10.

system.”¹¹ Yet no party has been able to quantify those cost reductions or other benefits. The record of administrative action in other jurisdictions, on the other hand, plainly reveals that states with aggressive net metering compensation structures have faced resulting rate modification proceedings to remedy the shifting of costs to non-participating customers.¹²

On March 1, 2022, the Commission held a public hearing on the proposed rule modifications in accordance with the Mississippi Administrative Procedures Act, Miss. Code Ann. §§ 25-43-1.101 *et seq.* All interested parties were provided the opportunity to appear and provide comment at the hearing. Ultimately, the following seven (7) parties signed in to make public comments:

1. Audubon Delta;
2. Scenic Hill Solar, LLC;
3. Sierra Club;
4. Posigen, Inc.;
5. Sundial Solar Power;
6. Entergy Mississippi, LLC; and
7. Mississippi Power Company¹³

After carefully reviewing all final written comments and thoroughly considering the testimony presented at the March 1, 2022 public hearing, the Commission finds that the rule modifications contained in the attached Exhibit “A” strike an appropriate balance of the issues raised in this docket and provide fair regulation within the interest of the public. As discussed below, all revisions made

¹¹ Feb. 16, 2022 Comments of Sierra Club at p. 8.

¹² See <https://nccleantech.ncsu.edu/wp-content/uploads/2021/01/Q4-20-Solar-Exec-Summary-Final.pdf>.

¹³ See March 2022 Meeting Minutes, Minute Book 109 at p. 4135.

and accepted by the Commission have been drawn directly from the comments and testimony submitted in this docket.

II. The Commission's Rulemaking Authority

Mississippi Code Annotated § 77-3-45 empowers this Commission to “prescribe, issue, amend and rescind such reasonable rules and regulations as may be reasonably necessary or appropriate to carry out the provisions of this chapter.”¹⁴ As set forth in Miss. Code Ann. § 77-3-2, moreover, the Commission's rules and regulations should advance the following public policy declarations which, among others, expressly underlie the Public Utility Act:

(a) To provide fair regulation of public utilities in the interest of the public;

....

(c) To promote adequate, reliable and economical service to all citizens and residents of the state;

(d) To provide just and reasonable rates ... consistent with long-term management and conservation of energy resources;

(e) To encourage and promote harmony between public utilities, their users and the environment; [and]

(f) To foster the continued service of public utilities ... consistent with the level of service needed ... for the promotion of the general welfare.¹⁵

In addition, the Legislature has granted the Commission broad authority with respect to rate-regulated utilities, encouraging the Commission “to take every opportunity to advance the economic development of the state” when carrying out its statutory directives.¹⁶ For the reasons that follow, the revised rules attached as

¹⁴ Miss. Code Ann. § 77-3-45.

¹⁵ Miss. Code Ann. § 77-3-2(1).

¹⁶ See Miss. Code Ann. § 77-3-2(1)(i).

Exhibit “A” serve these legislative directives, as well as a number of other key policy interests.

III. Discussion of Specific Rule Changes

The Commission’s primary motivations for adopting the original Net Metering and Interconnection Rules were and continue to stem from the desire to increase access to solar generation and other means of self-service in the State of Mississippi, while ensuring that non-participating customers are not subject to excessive shifting of fixed costs. The Commission remains convinced that, while modifications to the Rules are in order, the measured approach described herein will serve the public interest in the most equitable manner.

A. Name and Terminology Changes

As a preliminary matter, the Commission finds that the names of the Rules and several identifying terms within them should be changed as follows:

1. The name of Title 39, Part IV has been changed from “Mississippi Distributed Generator Interconnection and Net Metering” to “Mississippi Distributed Generator Interconnection and Net Renewable Generation.”
2. The name of Subpart II has been changed from “Mississippi Renewable Energy Net Metering Rule (MRENMR)” to “Mississippi Net Renewable Generation Rule (MsNRG).”
3. All references to “Renewable Energy Net Metered Interconnection Customer (RENMIC)” have been changed to “Renewable Energy Distributed Generation Interconnection Customer (REDGIC).”
4. All references to the “Nonquantifiable benefits adder” have been changed to “Distributed Generation Benefits Adder.”
5. The annual “Net Metering Report” has been retitled, “Net Renewable Generation Report.”

6. All remaining references to “net metering” within the rules have been changed to “net generation.”

These non-substantive modifications were not contained in the redlines proposed on January 18, 2022; however, the Commission finds that these terminology changes better reflect the type of distribution generation (DG) program(s) made available to customers of regulated electric utilities under the Net Renewable Generation Rules. Traditional “net metering” is a billing mechanism that credits solar energy system owners at the retail rate for electricity they add to the grid. If the home is net-metered, the electricity meter will run backwards to provide a credit against those periods of time when electricity use at the home exceeds system output. In essence, the grid serves a “storage” for the excess energy generated by the DG system and customers are only billed for their “net” energy use. Additionally, traditional net metering credits are typically created and carried throughout a twelve (12) month period to accommodate changes in seasons, solar production, and home energy consumption.

In contrast, the Net Renewable Generation Rules require utilities to compensate customers for any excess generation that flows across the meter at an amount that is less than the full retail rate.¹⁷ The dollar amount ultimately paid to a DG customer, if any, is the difference between the total value of electricity consumed and the value of the excess generation. Mississippi does not allow “credits” to be carried over a twelve-month period, but requires utilities to “true-up”

¹⁷ Per the Mississippi Rule, compensation for excess generation is calculated at the avoided cost rate plus 2.5 cents per kWh and, if qualified, an additional 2.0 cents per kWh for LMI customers.

any excess generation by the customer at the end of the monthly billing period and credit the customer accordingly.

Traditional net metering and Mississippi's distributed generation compensation policy each allows utility customers to generate their own electricity cleanly and efficiently. During the day, most solar customers produce more electricity than they consume. Net metering allows them to export that power to the grid and reduce their *future* electric bills, whereas Mississippi's policy allows customers to export power to the grid and reduce *current* electric bills. Furthermore, the current rule describes customer compensation as the "Total Benefits of *Distributed Generation*," rather than the "Total Benefits of *Net Metering*." ¹⁸

For all of these reasons, the Commission finds that references to "net metering" should be changed throughout the Net Renewable Generation Rules. Stated simply, Mississippi does not offer traditional net metering. Instead, the rules adopted by the Commission in December 2015 and modified herein establish a distinct statewide compensation program for distributed generation by customers of regulated electric utilities. Changing references of "net metering" to "distributed generation" throughout the rule are therefore appropriate for both accuracy and consistency.

¹⁸ See Miss. Renewable Energy Net Metering Rule at Chapter 02, Subpart 102.

B. Pricing Commitments

The Commission finds that the following revisions to the pricing and compensation provisions of the Net Renewable Generation Rules are in order:

1. The definition of “Avoided Cost of Wholesale Power” has been revised to require (“shall”) rather than permit (“may”) utilities to utilize daytime energy production when calculating avoided cost for solar PV systems.
2. The Distributed Generation Benefits Adder¹⁹ has been revised as “equal to” rather than “no more than” 2.5 cents per kWh, and it is now grandfathered in for a period of twenty-five (25) years.
3. Eligibility for the Low-Income Benefits Adder of 2 cents per kWh has been expanded to include customers with annual household incomes of up to 250% of the federal poverty level.²⁰
4. The Low-Income Benefits Adder has also been grandfathered in for a period of twenty-five (25) years.

In their second set of comments, many of the solar stakeholders continued to request that the Commission increase the current pricing structure to the full retail rate. However, none of those comments included any new state-specific information or data to justify such a substantial change at this time.²¹ The Commission therefore remains convinced that these measured, incremental changes are appropriate. Expanding eligibility for the Low-Income Benefits Adder increases access to means of self-service that may otherwise be cost-prohibitive. Moreover, lengthening the time period over which customers are guaranteed to receive the

¹⁹ Previously known as the Nonquantifiable Benefits Adder

²⁰ Previously 200%

²¹ In fact, “Based on SEIA’s analysis, this new proposed MRENMR LMI structure essentially allows participants the same payback as if the Commission were to adopt a full retail rate net metering program.” See SEIA Feb. 15, 2022 Comments at p. 5. This comment considers the expansion of the Low Income Benefits Adder in conjunction with the availability of up-front rebates for LMI customers, as discussed below.

benefits adders provides those customers with reasonable assurances regarding the value of their investment over time. Together, these changes should help enhance access to distributed generation without increasing the risk of cross-subsidies for non-participants.

C. Meter Aggregation

Perhaps the most substantive addition to the Commission's revised Net Renewable Generation Rules is the inclusion of meter aggregation provisions. These provisions would permit certain DG customers who have multiple meters to use the energy generated by one DG system and offset their usage on all eligible meters.²² As originally proposed on January 18, 2022, meter aggregation was limited to agricultural or tax-exempt governmental entity customers, and the aggregated meters had to be located on the same premises or within one mile of the customer's DG system. Nearly all stakeholders viewed the addition of meter aggregation favorably; however, many of the solar advocates requested that the limitations on eligibility be lifted or expanded, and that the system capacity limits for aggregating customers be increased.²³

The Commission finds these requests to be reasonable. Accordingly, the Net Renewable Generation Rules attached as "Exhibit A" have been revised to permit meter aggregation for "Any REDGIC customer that seeks to generate electricity on

²² Agricultural or tax-exempt governmental entity customers

²³ See, e.g., Feb. 15, 2022 Audubon Delta Comments at p. 22 (redlining changes to meter aggregation provisions and commenting, "Replace 1 mile range with same EU service territory."); Feb. 15, 2022 Scenic Hill Solar Comments at p. 3 ("Meter aggregation is important for more than just agricultural and government customers, and should not be limited to a one-mile radius.").

the customer's side of the EU's meter using renewable energy sources, provided" that the DG system's capacity is limited to 3 MW AC and any additional meters are on the same property or within the same EU service territory as the DG system. Thus, eligibility is no longer limited to agricultural or tax-exempt governmental entities, capacity limits have been increased by 1 MW, and the geographic limitations on meter placement have been expanded beyond one mile.

D. REC Ownership

Under the revised Net Renewable Generation Rules, Renewable Energy Credits (RECs) "are and shall remain the property" of the DG customer unless otherwise approved by the Commission. DG Customers are no longer required to transfer RECs to their utilities as a condition of receiving the 2.5 cents per kWh Distributed Generation Benefits Adder. As discussed below, however, if a DG customer elects to receive an up-front rebate, that customer may be required to transfer any RECs to their utility as a condition to receiving said rebate.

E. Other Miscellaneous Changes

The following additional revisions were contained in the Commission's January 18, 2022 proposed redlines and drew no criticism or opposition from any of the commenters. The Commission finds that these changes provide needed clarity for both customers and electric providers when advanced metering technology and/or battery storage systems are in use.

1. The definition of "Net Generation" has been revised to note that special metering requirements are obviated with the use of advanced metering infrastructure/smart meters.

2. The Mississippi Net Renewable Generation Rule now states that battery storage systems shall not affect the total nameplate capacity of a customers' Distributed Generation Facility under the Rule.

Additionally, the Commission finds that system capacity limits under the Net Renewable Generation Rules should be measured in terms of alternating current (AC) rather than direct current (DC). While the utilities have objected that this change gives rise to consumer protection concerns because "changing the metric to 'alternating current' could allow the customer to be sold a large solar array with insufficient inverter capacity,"²⁴ the Commission agrees with other stakeholders that, "it is the most accurate way to measure DG system and net metering program size."²⁵ As explained by Scenic Hill Solar, LLC:

Putting all references to facility sizes in AC rather than direct current ("DC") is a practical change, reflective of the fact that a kWh of energy from a utility, which is delivered in AC, is being offset by a kWh from the customer, after the DC energy from a solar array is converted to AC energy through an inverter.²⁶

Accordingly, the metrics for system size limitations throughout the Net Renewable Generation Rules shall now be referenced in terms of alternating current (AC).

F. Continued Review

The remaining revisions to the Net Renewable Generation Rules generally relate to the Commission's continued review, oversight, and involvement in the

²⁴ See Feb. 15, 2022 Comments of Entergy Mississippi, LLC at p. 7.

²⁵ See Feb. 15, 2022 Comments of Posigen, Inc. at p. 4.

²⁶ April 5, 2021 Comments of Scenic Hill Solar, LLC at p. 6; *see also* April 5, 2021 Opening Comments of Dimension Renewable Energy at p. 5 ("Placing the cap on the direct current capacity of the renewable power source is counterintuitive since these inverter-based resources export power onto the electric utility (EU) system in alternating current.").

Rules' implementation over time. First, the previous three percent (3%) net metering participation cap has been amended and increased. Whereas the Rule previously permitted utilities to unilaterally refuse new DG interconnections once participation reached three percent (3%) of the utility's total system peak demand, the revised Rule increases the cap to four percent (4%) and requires that utilities seek commission approval prior to refusing additional net generation requests. Similarly, the reopener provision of the Rule is now discretionary, and it is triggered after either five years from the effective date of this Order, or when the total net distributed generation capacity reaches four percent (4%) of the utilities' peak system demand, whichever comes first.

While both utilities argued that firm participation caps are necessary to ensure the protection of non-participating customers,²⁷ the Commission finds that DG participation in Mississippi is currently quite low. Moreover, the Commission has included other means of safeguarding customers from cost-shifting, such as the authorization of a fully-costed customer charge. Retaining hard participation caps in addition to these other protections has the potential to discourage developers from entering the Mississippi market at all. The changes adopted by the Commission today should remove such unintended market constraints, while still ensuring that the Commission retains oversight and discretion over the Net

²⁷ See Feb. 15, 2022 Comments of Mississippi Power Company at p. 5; Feb. 15, 2022 Comments of Entergy Mississippi, LLC at p. 5

Renewable Generation Rules as participation levels and solar penetration increase in the coming years.

The annual reporting requirements of the Net Renewable Generation Rules have also been amended to require utilities to report the total number of DG customers receiving the Low-Income Benefits Adder each calendar year. This information should prove useful in monitoring whether the newly-expanded LMI provisions of the Rules do in fact aid in increasing the adoption of distributed generation in Mississippi.

Finally, the Working Group provision of the Net Renewable Generation Rules has been retitled and revised to expand the purpose of the group beyond consumer protection. Moving forward, a joint interagency working group will be established between representatives of the Commission, the Public Utilities Staff, the Mississippi Attorney General's Office and others, for the "continued monitoring and consideration of the fairness and efficacy of this Rule." The joint working group must meet bi-annually and present any recommended action items to the Commission by January 30th each year.

IV. Upfront Rebates and Solar for Schools

As raised in the January 18, 2022 Order, the Commission finds that these two matters, while not appropriate for inclusion in the Net Renewable Generation Rules themselves, will serve the public interest and further advance the policy goals underlying the Rules. In the final comments submitted in response to the Commission's January 18, 2022 Order, multiple parties provided feedback on the

Commission's proposed rebate framework. Taking those into consideration, the Commission hereby amends the directives outlined in the Commission's January 18, 2022 Order; in their respective Annual Energy Delivery Plan dockets established pursuant to Rule 29 of the Commission's Public Utilities Rules of Practice and Procedure, EML and MPC are hereby directed to make a rate tariff filing, within sixty (60) days following a Final Order adopting changes to the Net Renewable Generation Rules, consistent with the following:

1. Each IOU shall offer a one-time \$3,500.00 distributed energy facility rebate to any retail residential customer participating as a REDGIC.
2. Prior to receiving a distributed energy facility rebate, the retail residential customer shall conduct an IOU approved Energy Efficiency audit.
3. Upon retail residential customer consent, the distributed energy facility rebate shall be directly provided to the distributed energy facility installer or contractor.
4. The total annual rebate budget for Entergy Mississippi, LLC shall be \$10 million; the total annual budget for Mississippi Power Company shall be \$5 million.
5. Each IOU shall bifurcate its annual rebate budget, with 50% being available for retail residential customers participating as a REDGIC who is also eligible for the MsNRG low-income benefits adder; the remaining 50% shall be available for retail residential customers participating as a REDGIC who is not eligible for the MsNRG low-income benefits adder.

6. To receive a distributed energy facility rebate, the REDGIC's renewable distributed energy facility must be at least 3kW and sized so that it is not projected to generate more than 110% of the customer's forecasted annual electricity usage.
7. Only one \$3,500.00 distributed energy facility rebate shall be made available to each eligible retail residential customer account.
8. Sufficient proof of purchase and completion of the above-mentioned IOU Energy Efficiency audit must be provided prior to receipt of a \$3,500.00 distributed energy facility rebate.
9. The budgets for the distributed energy facility rebates shall be accounted for and recovered through rates in the same manner as demand-side management programs established under Rule 29.
10. The disbursement of the distributed energy facility rebates shall be audited by the Mississippi Public Utilities Staff in the same manner as demand-side management and other energy efficiency rebate programs under Rule 29.
11. The rebate program shall begin following Commission approval of the above-mentioned rate filings and shall end 5 years from the date of the IOU's implementation of its respective rebate programs.
12. Prior to receiving a distributed energy facility rebate, any solar installer, contractor, vendor shall submit the following to the Commission:
 - a. Name of entity;

- b. Principal place of business;
- c. Registration with the Mississippi Secretary of State;
- d. The identity and contact information of a designated representative with the authority to speak on behalf of the entity; and
- e. All marketing materials to be used in Mississippi.

The directives outlined herein contain deviations from the Commission's January 18, 2022 Order related to the distributed energy facility rebates. The distributed energy facility rebate amount was increased from \$3,000 to \$3,500 to account for the removal of the \$1,000 energy efficiency investment rebate. After further review, the Commission finds that rebates associated with energy efficiency investments are currently available for customers in the IOU's respective Rule 29 Annual Energy Delivery Plans, and its inclusion in this program is not necessary at this time. The Commission reiterates that the rebate amount was selected to reflect a meaningful, but not full-cost, discount for the facility sizes applicable to the program.

The upper band on facility size limitations has been adjusted to no more than 110% of the customer's forecasted annual electricity usage. This is to ensure residential retail customers realize customer-specific benefits, while still being rooted in self-supply. Eligibility for distributed energy facility rebates has been amended to allow 50% of each IOU budget available for residential retail customers who are not eligible for the MsNRG low-income benefits adder. This amendment is to provide open access to distributed energy facility rebates, while at the same time preserving 50% of the budget for LMI residential retail customers. The budget

amounts identified in the Commission January 18, 2022 Order have been adjusted to provide more clarity for the programs.

Finally, the requirement of receiving an IOU approved Energy Efficiency audit before receiving a distributed energy facility rebate has been added to ensure customers receive the valuable information these audits provide as they evaluate self-generation options. The Commission's requirement that solar installers, contractors, vendors shall submit the above-mentioned information to the Commission prior to receiving a distributed energy facility rebate is to ensure the Commission is aware of these entities in the state and to protect customers against misleading or predatory marketing practices.

The Commission reiterates that this new rebate coupled with the already enhanced pricing adder available to low-income customers, represents a significant economic incentive that will effectively bolster and entice distributed energy adoption for low-income customers of the rate-regulated electric IOUs in the state.

The Commission's January 18, 2022 Order found that access to renewable energy for public schools was in the public interest and directed Entergy Mississippi, LLC and Mississippi Power Company to file proposed Solar for Schools offerings for the Commission's consideration. The Commission provided guiding principles as an attachment to the Commission's January 18, 2022 Order. In an effort to produce consistencies between the Commission's Net Renewable Generation Rules and the Solar for Schools principles, the Commission provides Exhibit "B" to this Order clarifying principles to guide Entergy Mississippi, LLC

and Mississippi Power Company's proposed Solar for Schools offerings to be filed within sixty (60) days following a Final Order adopting changes to the Net Renewable Generation Rules.

V. Conclusion

The revised rules attached as Exhibit "A" represent the culmination of a lengthy and thorough rulemaking process. They also reflect and incorporate input from nearly every party to this docket. Having considered the law, the comments filed, the testimony presented at the hearing, and the entirety of the record, the Commission finds that its revised Mississippi Distributed Generator Interconnection and Net Renewable Generation Rules provide fair regulation in the interest of the public and strike a balance between the interests of participating and non-participating customers. More specifically, the revised rules adopted herein should increase access to distributed generation while avoiding excessive shifting of fixed costs.

IT IS THEREFORE ORDERED that the attached Mississippi Distributed Generator Interconnection Rule and Mississippi Net Renewable Generation Rule are hereby adopted as modified. The revisions to these rules shall be included in the next publication of Title 39 of the Mississippi Administrative Code. The Executive Secretary is directed to transmit a copy of this Final Order and any other necessary documents to the Secretary of State's Office in accordance with the Mississippi Administrative Procedures Act. The Executive Secretary is also

directed to transmit a copy of this Final Order to any known parties of interest and shall publish notice of same according to applicable law.

IT IS FURTHER ORDERED that this Order and the attached Rules shall become effective thirty (30) days after filing with the Secretary of State's Office and shall be deemed issued on the day it is served upon the intervening parties of record by the Executive Secretary of this Commission who shall note the service date in the file of this Docket.

SO ORDERED, this the 12th day of July, 2022.

Chairman Dane Maxwell voted aye; Commissioner Brent Bailey voted aye, and Commission Brandon Presley voted aye.

MISSISSIPPI PUBLIC SERVICE COMMISSION



Dane Maxwell
DANE MAXWELL, CHAIRMAN

Brent Bailey
BRENT BAILEY, COMMISSIONER

Brandon Presley
BRANDON PRESLEY, COMMISSIONER

ATTEST: A TRUE COPY

Katherine Collier
KATHERINE COLLIER
Executive Secretary

Effective this, the 12th day of July, 2022.

TITLE 39: UTILITIES

PART IV: Mississippi Distributed Generator Interconnection and Net Renewable Generation

Subpart I: Mississippi Distributed Generator Interconnection Rule

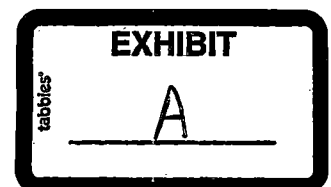
Chapter 01: Introduction

The Mississippi Distributed Generation Interconnection Rule (MDGIR) sets forth standards to establish the technical and procedural requirements for Distributed Generator Facilities (DGFs) to be interconnected and operated in Parallel with the Electric Distribution System (EDS) owned or operated by Electric Utilities (EUs) in Mississippi under the jurisdiction of the Mississippi Public Service Commission (Commission). Capitalized terms used in this rule have the meaning specified in the section titled DEFINITIONS.

Chapter 02: Definitions

When used in this chapter, the following terms and phrases shall have the following meaning:

- 100 “Adverse System Impact”** means a negative effect, due to technical or operational limits on conductors or equipment being exceeded, that compromises the safety and reliability of the EDS.
- 101 “Applicable Laws and Regulations”** means all duly promulgated and applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.
- 102 “Certificate of Completion”** means a certificate in a completed form approved by the Commission containing information about the Interconnection Equipment to be used, its installation and local inspections.
- 103 “Certified Interconnection Equipment” or “Certified Equipment” or “Certified”** means a designation that the Interconnection Equipment meets the following requirements:
1. The Interconnection Equipment has been tested by a Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration (OSHA) in accordance with the following relevant codes and standards:
 - a. IEEE 1547.1 Standard for Conformance Tests Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems; and
 - b. Underwriters Laboratories (“UL”), UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems;



2. The Interconnection Equipment shall meet the requirements of the most current approved version of each code and standard listed above, as amended and supplemented at the time the Interconnection Request is submitted to be deemed Certified;
3. The Interconnection Equipment has been labeled and is publicly listed by such NRTL at the time of the interconnection application;
4. The Interconnection Customer verifies that the intended use of the Interconnection Equipment falls within the use or uses for which the Interconnection Equipment is labeled and is listed by the NRTL;
5. If the Interconnection Equipment is an integrated equipment package such as an inverter, then the Interconnection Customer shall show that the generator or other electric source being utilized is compatible with the Interconnection Equipment and is consistent with the testing and listing specified for this type of Interconnection Equipment;
6. If the Interconnection Equipment includes only interface components (switchgear, multi-function relays, or other interface devices), an Interconnection Customer shall demonstrate that the generator or other electric source being utilized is compatible with the Interconnection Equipment and is consistent with the testing and listing specified for this type of Interconnection Equipment; and
7. Certified Interconnection Equipment shall not require further design testing or Production Testing, as specified by IEEE Standard 1547 Sections 5.1 and 5.2, or additional Interconnection Equipment modification to meet the requirements. However, nothing herein shall preclude the need for an on-site Witness Test or operational test by the Interconnection Customer.

104 “Commission” means the Mississippi Public Service Commission.

105 “Commissioning Tests” means the tests applied to a DGF by an Interconnection Customer after construction is completed to verify that the DGF does not create Adverse System Impacts. At a minimum, the scope of the Commissioning Tests performed shall include the commissioning test specified by IEEE Standard 1547 section 5.4 “Commissioning Tests.”

106 “Distributed Generator Facility” or “DGF” means the equipment used by an Interconnection Customer to generate or store electricity that operates in Parallel with the EDS. A DGF typically includes an electric generator, prime mover, and the Interconnection Equipment required to safely interconnect with the EDS or local electric power system.

- 107 **“Distribution System Upgrade”** means a required addition or modification to the EU's EDS at or beyond the Point of Common Coupling (PCC) to accommodate the interconnection of a DGF. Distribution System Upgrades do not include Interconnection Facilities.
- 108 **“Electric Utility” or “EU”** means an electric public utility that distributes electricity to customers and is subject to the jurisdiction of the Commission pursuant to the provisions of Mississippi Code Annotated §§ 77-3-1, *et seq.*
- 109 **“Electric Distribution System” or “EDS”** means the facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries from interchanges with higher voltage transmission networks that transport bulk power over longer distances. The voltage levels at which EDSs operate differ among areas but generally carry less than 69 kilovolts of electricity. EDS has the same meaning as the term Area EPS, as defined in 3.1.6.1 of IEEE Standard 1547.
- 110 **“Facilities Study”** means an engineering study conducted by the EU to determine the required modifications to the EU's EDS, including the cost and the time required to build and install such modifications as necessary to accommodate an Interconnection Request.
- 111 **“Fault Current”** means the electrical current that flows through a circuit during an electrical fault condition. A fault condition occurs when one or more electrical conductors contact ground or each other. Types of faults include phase to ground, double-phase to ground, three-phase to ground, phase-to-phase, and three-phase.
- 112 **“Feasibility Study”** means a study performed to identify the existence of obvious adverse impacts before additional studies are undertaken for the proposed project to continue in the process.
- 100 **“Governmental Authority”** mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, EU or any affiliate thereof.
- 101 **“IEEE Standard 1547”** means the Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 1547 (2003) "Standard for Interconnecting Distributed Resources with Electric Power Systems," as amended and supplemented at the time the Interconnection Request is submitted.
- 102 **“IEEE Standard 1547.1”** means the IEEE Standard 1547.1 (2005) "Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems," as amended and supplemented at the time the Interconnection Request is submitted.

- 103 **“Interconnection Agreement” or “Agreement”** means a form of interconnection agreement approved by the Commission which is applicable to Interconnection Requests pertaining to DGFs. The agreement between the Interconnection Customer and the EU governs the connection of the DGF to the EU’s EDS, as well as the ongoing operation of the DGF after it is connected to the EU’s EDS.
- 104 **“Interconnection Application” or “Application”** means a form of interconnection application approved by the Commission which is applicable to Interconnection Requests pertaining to DGFs. This application provides the information needed by the EU to review the request for interconnection. For the Level 1 review process, the Application and Agreement are part of the same document.
- 105 **“Interconnection Customer”** means an entity that submits an Interconnection Request for a DGF to an EU's EDS.
- 106 **“Interconnection Equipment”** means a group of equipment, components, or an integrated system connecting an electric generator with a local electric power system or an EDS that includes all interface equipment including switchgear, protective devices, inverters or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.
- 107 **“Interconnection Facilities”** means facilities and equipment required by the EU to accommodate the interconnection of a DGF. Collectively, Interconnection Facilities include all facilities and equipment between the DGF and the PCC, including modification, additions, or upgrades that are necessary to physically and electrically interconnect the DGF to the EDS. Interconnection facilities are sole use facilities and do not include Distribution System Upgrades.
- 108 **“Interconnection Request”** means an Interconnection Customer's request, in the form of an Application approved by the Commission, requesting the interconnection of a new DGF, or to increase the capacity or modify operating characteristics of an existing approved DGF that is interconnected with the EU's EDS.
- 109 **“Line Section”** means that portion of an EU's distribution system connected to an Interconnection Customer, bounded by automatic sectionalizing devices or the end of the distribution line.
- 110 **“Local Electric Power System” or “Local EPS”** means facilities that deliver electric power to a load that are contained entirely within a single premises or group of premises. Local electric power system has the same meaning as the term local electric power system defined in 3.1.6.2 of IEEE Standard 1547.
- 111 **“Minor Equipment Modification”** means changes to the DGF that do not have a material impact on safety or reliability of the EDS.

- 112 **“Mississippi Distributed Generation Interconnection Rule (MDGIR)”** means the most current version of the procedures for interconnecting Distributed Generator Facilities adopted by the Mississippi Public Service Commission.
- 113 **“Nameplate Capacity”** means the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer and is usually indicated on a nameplate physically attached to the power production equipment.
- 114 **“Nationally Recognized Testing Laboratory” or “NRTL”** means a qualified private organization that meets the requirements of the Occupational Safety and Health Administration's (OSHA) regulations. NRTLs perform independent safety testing and product certification. Each NRTL shall meet the requirements as set forth by OSHA in the NRTL program.
- 115 **“Parallel Operation” or “Parallel”** means the sustained state of operation over 100 milliseconds, which occurs when a DGF is connected electrically to the EDS and thus has the ability for electricity to flow from the DGF to the EDS.
- 116 **“Point of Common Coupling” or “PCC”** means the point where the DGF is electrically connected to the EDS. Point of common coupling has the same meaning as defined in 3.1.13 of IEEE Standard 1547.
- 117 **“Primary Line”** means a distribution line rated at greater than 600 volts.
- 118 **“Production Test”** means production test as defined in IEEE Standard 1547.
- 119 **“Queue Position”** means the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the EU.
- 120 **“Radial Distribution Circuit”** means a circuit configuration where independent feeders branch out radially from a common source of supply. From the standpoint of a utility system, the area described is between the generating source or intervening substations and the customer's entrance equipment. A radial distribution system is the most common type of connection between a utility and load in which power flows in one direction from the utility to the load.
- 121 **“Scoping Meeting”** means a meeting between representatives of the Interconnection Customer and EU conducted for the purpose of discussing alternative interconnection options, exchanging information including any EDS data and earlier study evaluations that would be reasonably expected to impact interconnection options, analyzing information, and determining the potential feasible points of interconnection.
- 122 **“Secondary Line”** means a service line subsequent to the Primary Line that is rated for 600 volts or less, also referred to as the customer's service line.

- 123 **“System Impact Study”** means a study that identifies the electric system impacts that would result if the proposed DGF were interconnected without DGF modifications or EDS modifications, focusing on the Adverse System Impacts identified in the Feasibility Study.
- 124 **“UL Standard 1741”** means Underwriters Laboratories' standard titled "Inverters Converters, and Controllers for Use in Independent Power Systems," as amended and supplemented at the time the Interconnection Request is submitted.
- 125 **“Witness Test”** means verification (through on-site observation) by the EU that the installation evaluation required by IEEE Standard 1547 Section 5.3 and the Commissioning Test required by IEEE Standard 1547 Section 5.4, have been adequately performed. For Interconnection Equipment that has not been Certified, the Witness Test shall also include the verification by the EU of the on-site design tests as required by IEEE Standard 1547 Section 5.1 and verification by the EU of Production Tests required by IEEE Standard 1547 Section 5.2. All tests verified by the EU are to be performed in accordance with the applicable test procedures specified by IEEE Standard 1547.1.

Chapter 03: INTERCONNECTION REQUESTS, FEES, AND FORMS

- 100 Interconnection Customers seeking to interconnect a DGF shall submit an Interconnection Request to the EU that owns the EDS to which interconnection is sought, using an application approved by the Commission. Electronic versions of such Commission-approved Application forms shall be posted on the EU's website. The EU shall establish processes for accepting Interconnection Requests electronically, specifically through online submission. Such online submission portal should include, at a minimum, information on interconnection times and procedures, a repository of relevant forms that allow for electronic entry of text, an application status tracker, and a searchable interconnection queue that is updated on a regular basis.
- 101 When an Interconnection Customer is not currently a customer of the EU at the proposed PCC, upon request from the EU, the Interconnection Customer shall provide proof of site control evidenced by a property tax bill, deed, lease agreement, or other legally binding contract.
- 102 Interconnection fees shall be governed as follows for all Interconnection Requests and shall be published on each EU's website:
1. An EU may not charge an application, or other fee, to an applicant that requests Level 1 interconnection review. However, if an application for Level 1 interconnection review is denied because it does not meet the requirements for Level 1 interconnection review and the applicant resubmits the application under another review procedure in accordance with the MDGIR, the EU may impose a fee for the resubmitted application, consistent with this section.

2. For a Level 2 interconnection review, the EU may charge fees of up to \$50.00 plus \$1.00 per kilowatt of the customer-generator facility's capacity, plus the reasonable cost of any required minor modifications to the electric distribution system or additional review. Costs for such minor modifications or additional review will be based on the EU's non-binding, good faith estimates and the ultimate actual installed costs. Costs for engineering work done as part of any additional review will not exceed \$100.00 per hour.
 3. For a Level 3 interconnection review, the EU may charge fees of up to \$100.00 plus \$2.00 per kilowatt of the customer-generator facility's capacity, as well as charges for actual time spent on any required impact or facilities studies. Costs for engineering work done as part of an impact study or interconnection facilities study will not exceed \$100.00 per hour. If the EU must install facilities in order to accommodate the interconnection of the customer generating facility, the cost of such facilities will be the responsibility of the applicant.
- 103 When the EU determines that an Interconnection Request is complete, a modification of DGF design by the Interconnection Customer other than a Minor Equipment Modification that is not agreed to in writing by the EU shall require submission of a new Interconnection Request.

Chapter 04: INTERCONNECTION REVIEW LEVELS

- 100 The EU shall review Interconnection Requests using one of the three levels of review procedures established below. The EU shall first use the level of DGF Agreement specified by the Interconnection Customer in the Application. The EU may not impose additional requirements not specifically authorized unless the EU and the Interconnection Customer mutually agree to do so in writing.
- 101 When an Interconnection Request is for an increase in capacity for an existing DGF, the Interconnection Request shall be evaluated on the basis of the new total Nameplate Capacity of the DGF.
- 102 When an Interconnection Request is for a DGF that includes multiple energy production devices at a site for which the Interconnection Customer seeks a single PCC, the Interconnection Request shall be evaluated on the basis of the aggregate Nameplate Capacity of the multiple devices.

Chapter 05: LEVEL 1 INTERCONNECTION REVIEWS

- 100 The EU shall use Level 1 review procedures to evaluate Interconnection Requests when:
1. The DGF is inverter-based;
 2. The DGF has a Nameplate Capacity of 20 kW or less; and

3. The Interconnection Equipment proposed for the DGF is Certified.
- 101** For Level 1 Interconnection Review, the EU shall first evaluate the potential for Adverse System Impacts using the following screens, which must be satisfied:
1. For interconnection of a proposed DGF to a Line Section on a Radial Distribution Circuit, the aggregated generation on the Line Section, including the proposed DGF, shall not exceed 15% of the Line Section annual peak load.
 2. When a proposed DGF is to be interconnected to a single-phase shared Secondary Line, the aggregate generation capacity on the shared Secondary Line, including the proposed DGF, may not exceed 20 kW.
 3. When a proposed DGF is single-phase and is to be interconnected to a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
 4. Construction of facilities by the EU on its own system is not required to accommodate the DGF.
- 102** The Level 1 Interconnection Review shall then be conducted in accordance with the following procedures:
1. An EU shall, within 10 business days after receipt of the Interconnection Request, inform the Interconnection Customer in writing or by electronic mail that the Interconnection Request is complete or incomplete and indicate what, if any, materials are missing.
 2. When an Interconnection Request is complete, the EU shall assign a Queue Position.
 3. The EU shall, within 15 business days after notifying a Level 1 applicant that the application is complete, indicate that the DGF equipment meets all Level 1 criteria, verify the DG can be interconnected safely and reliably using Level 1 screens, and provide a conditionally approved Level 1 Interconnection Application Form and Agreement to the Interconnection Customer.
- 103** Unless the EU determines and demonstrates to the Interconnection Customer that a DGF cannot be interconnected safely or reliably to its system and provides a letter to the Interconnection Customer explaining its reasons for denying an Interconnection Request, the EU's final approval of the Interconnection Agreement is subject to the following conditions:
1. 'The DGF has been approved by local or municipal electric code officials with jurisdiction over the interconnection;

2. The EU has received the required information on the Certificate of Completion from the Interconnection Customer. Completion of local inspections may be designated on inspection forms used by local inspecting authorities; and
 3. The EU has completed its Witness Test in accordance with the MDGIR.
- 104 Within 10 business days of the estimated commissioning date indicated on the Interconnection Request, the EU shall, upon reasonable notice and at a mutually convenient time, conduct a Witness Test of the DGF to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes.
- 105 When a DGF is not approved under a Level 1 review, the Interconnection Customer may submit a new Interconnection Request for consideration under Level 2 or Level 3 procedures.

Chapter 06: LEVEL 2 INTERCONNECTION REVIEWS

- 100 The EU shall use the Level 2 Interconnection Review procedure to evaluate an Interconnection Request when:
1. The DGF has a Nameplate Capacity rating of 2 MW or less;
 2. The Interconnection Equipment proposed for the DGF is Certified; and
 3. The aggregated total of the Nameplate Capacity of all of the generators on the circuit, including the proposed DGF, is 2 MW or less.
- 101 No construction of facilities by an EU shall be required to accommodate the DGF, except as permitted by an additional review for minimal modifications of the EDS, as described in these Level 2 procedures.
- 102 For Level 2 Interconnection Review, the EU first shall evaluate the potential for Adverse System Impacts using the following screens, which must be satisfied:
1. For interconnection of a proposed DGF to a radial distribution circuit, the aggregated generation on the Line Section, including the proposed DGF, may not exceed 15% of the Line Section annual peak load.
 2. The proposed DGF, in aggregation with other generation on the distribution circuit, may not contribute more than 10% to the distribution circuit's maximum Fault Current at the point on the Primary Line nearest the Point of Common Coupling (PCC).

3. The proposed DGF, in aggregate with other generation on the distribution circuit, may not cause any distribution protective devices and equipment (including substation breakers, fuse cutouts, and line reclosers), or other customer equipment on the EDS to be exposed to Fault Currents exceeding 87.5% of the short circuit interrupting capability. The Interconnection Request may not receive approval for interconnection on a circuit that already exceeds 87.5% of the short circuit interrupting capability.
 4. When a DGF is to be connected to three-phase, three-wire primary EU distribution lines, a three-phase or single-phase generator shall be connected phase-to-phase.
 5. When a DGF is to be connected to three-phase, four-wire primary EU distribution lines, a three-phase or single-phase generator shall be connected line-to-neutral and shall be effectively grounded.
 6. When the proposed DGF is to be interconnected on a single-phase shared Secondary Line, the aggregate generation capacity on the shared Secondary Line, including the proposed DGF, shall not exceed 20 kW.
 7. When a proposed DGF is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
 8. A DGF, in aggregate with other generation interconnected to the distribution side of a substation transformer feeding the circuit where the DGF proposes to interconnect, may not exceed 10 MW in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity.
 9. No construction of facilities by an EU on its own system shall be required to accommodate the DGF.
- 103** The Level 2 Interconnection Review shall then be conducted in accordance with the following procedures:
1. An EU shall, within 10 business days after receipt of the Interconnection Request, inform the Interconnection Customer in writing or by electronic mail that the Interconnection Request is complete or incomplete and indicate what, if any, materials are missing. As part of this process, the EU shall assign a Queue Position. The Queue Position of the Interconnection Request shall be used to determine the potential Adverse System Impact of the DGF based on the relevant screening criteria. If there are higher queued Interconnection Requests on the same radial line circuit, the EU shall evaluate the Interconnection Requests by performing any Level 2 screens requiring aggregate capacity calculations and determine if the DGF in combination with the higher queued Interconnection Requests exceeds any of the

aggregate capacity requirements. If an aggregate capacity requirement is exceeded, the EU shall notify the Interconnection Customer and shall not be obligated to meet the timeline for reviewing the Interconnection Request until such time as the EU has completed the review of all other Interconnection Requests that have a higher Queue Position and impact the aggregate capacity calculation that has been exceeded.

2. At the time an EU determines additional information is required to complete an evaluation, the EU shall request the information. The time necessary to complete the evaluation may be extended by mutual agreement of the parties, but only to the extent of the time required for receipt of the additional information. During an extension of time to submit additional information, the EU may not alter the Interconnection Customer's Queue Position.
 3. Within 20 business days after the EU notifies the Interconnection Customer that it has received a completed Interconnection Request, the EU shall:
 - a. Evaluate the Interconnection Request using the Level 2 screening criteria;
 - b. Review any analysis provided by the Interconnection Customer, using the same criteria used by the customer; and
 - c. Provide the Interconnection Customer with the EU's evaluation, including a comparison of the results of its own analyses with those of Interconnection Customer, if applicable. When an EU does not have a record of receipt of the Interconnection Request and the Interconnection Customer can demonstrate that the original Interconnection Request was delivered, the EU shall expedite its review to complete the evaluation of the Interconnection Request within 20 business days of the Interconnection Customer's re-submittal.
- 104** The EU shall provide the Interconnection Customer a DGF Interconnection Agreement within 5 business days of its determination that the Interconnection Request passes the Level 2 screening criteria.
- 105** When a DGF has failed to meet one or more of the Level 2 screens, the EU shall offer to perform additional review for minimal modifications of the EDS to determine whether minimal modifications to the EDS would enable the interconnection to be made consistent with safety, reliability and power quality criteria. The EU shall provide the Interconnection Customer with a nonbinding, good faith estimate of the costs of additional review for minimal modifications of the EDS. The EU shall undertake the additional review for minimal modifications of the EDS or the modifications only after the Interconnection Customer consents to pay for the review and modifications.
- 106** If the DGF fails one or more of the Level 2 screening criteria but the EU determines that minimal modifications to the EDS would enable the DGF to interconnect safely and

reliably, the EU shall provide the Interconnection Customer a DGF Interconnection Agreement within 5 business days of making that determination.

- 107 If the EU finds that the DGF cannot be interconnected with minimal modifications to the EDS, the EU shall provide the Interconnection Customer a letter explaining its reasons for denying the Interconnection Request. The Interconnection Customer may submit a new Interconnection Request for consideration under a Level 3 interconnection review.
- 108 An Interconnection Customer shall have 30 business days to sign and return the Agreement. When an Interconnection Customer does not sign the DGF Interconnection Agreement within 30 business days, the Interconnection Request shall be deemed withdrawn unless the Interconnection Customer requests in writing prior to the expiration of the 30 business day period to extend the deadline. The EU may not unreasonably deny the request for extension.
- 109 The DGF Interconnection Agreement shall not become final until:
1. The milestones agreed to in the DGF Interconnection Agreement are satisfied;
 2. The DGF is approved by electric code officials with jurisdiction over the interconnection;
 3. The Interconnection Customer provides a Certificate of Completion to the EU. Completion of local inspections may be designated on inspection forms used by local inspecting authorities; and
 4. The Witness Test was successfully completed per the terms and conditions found in the Agreement.
- 110 If the DGF is not approved under a Level 2 review, the EU shall provide the Interconnection Customer a letter explaining its reasons for denying the Interconnection Request. The Interconnection Customer may submit a new Interconnection Request for consideration under a Level 3 interconnection review. The Queue Position assigned to the Level 2 Interconnection Request shall be retained provided the request is made within 15 business days of notification that the current Interconnection Request is denied.

Chapter 07: LEVEL 3 INTERCONNECTION REVIEWS

- 100 The EU shall use the Level 3 review procedure to evaluate an Interconnection Request when the Interconnection Customer requests Level 3 review.
- 101 The Level 3 review shall be conducted in accordance with the following process:
1. An EU shall, within 10 business days of receipt of an Interconnection Request, inform the Interconnection Customer in writing or by electronic means that the

Interconnection Request is complete or incomplete and indicate what, if any, materials are missing.

2. When the Interconnection Request is deemed not complete, the EU shall provide the Interconnection Customer with a written list detailing information required to complete the Interconnection Request. The Interconnection Customer shall have 10 business days to provide appropriate data in order to complete the Interconnection Request, or the Interconnection Request shall be considered withdrawn. The parties may agree to extend the time for receipt of the additional information. The Interconnection Request shall be deemed complete when the required information has been provided by the Interconnection Customer, or the parties have agreed that the Interconnection Customer may provide additional information at a later time.
3. When an Interconnection Request is complete, the EU shall assign a Queue Position. The Queue Position of an Interconnection Request shall be used to determine the cost responsibility necessary for the facilities to accommodate the interconnection. The EU shall notify the Interconnection Customer about other higher-queued Interconnection Customers that have the potential to impact the cost responsibility.
4. Level 3 Scoping Meetings shall be conducted as follows:
 - a. By mutual agreement of the parties, the Scoping Meeting, interconnection Feasibility Study, interconnection System Impact Study, or interconnection Facilities Study provided for in a Level 3 review may be waived;
 - b. If agreed to by the parties, a Scoping Meeting shall be held within 10 business days, or other mutually agreed to time, after the EU has notified the Interconnection Customer that the Interconnection Request is deemed complete. The purpose of the meeting shall be to review the Interconnection Request, existing studies relevant to the Interconnection Request, and the results of the Level 1 or Level 2 screening criteria;
 - c. When the parties agree at a Scoping Meeting that an interconnection Feasibility Study shall be performed, the EU shall provide to the Interconnection Customer, no later than 5 business days after the Scoping Meeting, an interconnection Feasibility Study agreement, including an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study;
 - d. When the parties agree at a Scoping Meeting that an interconnection Feasibility Study is not required, the EU shall provide to the Interconnection Customer, no later than 5 business days after the Scoping Meeting, an interconnection System Impact Study agreement, including

an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study; and

- e. When the parties agree at the Scoping Meeting that an interconnection Feasibility Study and System Impact Study are not required, the EU shall provide to the Interconnection Customer, no later than 5 business days after the Scoping Meeting, an interconnection Facilities Study agreement including an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study.
5. Any required interconnection studies shall be carried out using the following guidelines:
- a. An interconnection Feasibility Study shall include the following analyses and conditions for the purpose of identifying and addressing potential Adverse System Impacts to the EU's EDS that would result from the interconnection:
 - b. Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
 - c. Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;
 - d. Initial review of grounding requirements and system protection;
 - e. Description and nonbinding estimated cost of facilities required to interconnect the DGF to the EU's EDS in a safe and reliable manner; and
 - f. Additional evaluations at the expense of the Interconnection Customer, when an Interconnection Customer requests that the interconnection Feasibility Study evaluate multiple potential points of interconnection.
6. An interconnection System Impact Study shall evaluate the impact of the proposed interconnection on both the safety and reliability of the EU's EDS. The study shall identify and detail the system impacts that result when the proposed DGF is interconnected without project or system modifications, focusing on the Adverse System Impacts identified in the interconnection Feasibility Study and potential impacts including those identified in the Scoping Meeting. The study shall consider all generating facilities that, on the date the interconnection System Impact Study is commenced, are directly interconnected with the EU's system, have a pending higher Queue Position to interconnect to the system, and have a signed a DGF Interconnection Agreement.
- a. An interconnection System Impact Study shall be performed when the interconnection Feasibility Study identifies a potential distribution system

Adverse System Impact. The EU shall send the Interconnection Customer an interconnection System Impact Study agreement within 5 business days of transmittal of the interconnection Feasibility Study report. The agreement shall include an outline of the scope of the study and a good faith estimate of the cost to perform the study. The System Impact Study shall include:

- i. A load flow study;
 - ii. Identification of affected systems;
 - iii. An analysis of equipment interrupting ratings;
 - iv. A protection coordination study;
 - v. Voltage drop and flicker studies;
 - vi. Protection and set point coordination studies;
 - vii. Grounding reviews; and
 - viii. Impact on system operation.
- b. An interconnection System Impact Study shall consider the following criteria:
- i. A short circuit analysis;
 - ii. A stability analysis;
 - iii. Alternatives for mitigating Adverse System Impacts on affected systems;
 - iv. Voltage drop and flicker studies;
 - v. Protection and set point coordination studies; and
 - vi. Grounding reviews.
- c. The interconnection System Impact Study shall provide the following:
- i. The underlying assumptions of the study;
 - ii. The results of the analyses;
 - iii. A list of any potential impediments to providing the requested interconnection service;
 - iv. Required Distribution System Upgrades; and
 - v. A nonbinding good faith estimate of cost and time to construct any required Distribution System Upgrades.
- d. The parties shall use an interconnection System Impact Study agreement approved by the Commission.
7. The interconnection Facilities Study shall be conducted as follows:
- a. Within 5 business days of completion of the interconnection System Impact Study, the EU shall send a report to the Interconnection Customer with an interconnection Facilities Study agreement, which includes an

outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study;

- b. The interconnection Facilities Study shall estimate the cost of the equipment, engineering, procurement and construction work including overheads needed to implement the conclusions of the interconnection Feasibility Study and the interconnection System Impact Study to interconnect the DGF. The interconnection Facilities Study shall identify:
 - i. The electrical switching configuration of the equipment, including transformer, switchgear, meters and other station equipment;
 - ii. The nature and estimated cost of the EU's Interconnection Facilities and Distribution System Upgrades necessary to accomplish the interconnection; and
 - iii. An estimate of the time required to complete the construction and installation of the facilities;
 - c. The parties may agree to permit an Interconnection Customer to separately arrange for a third party to design and construct the required Interconnection Facilities. The EU may review the design of the facilities under the interconnection Facilities Study agreement. When the parties agree to separately arrange for design and construction and to comply with security and confidentiality requirements, the EU shall make all relevant information and required specifications available to the Interconnection Customer to permit the Interconnection Customer to obtain an independent design and cost estimate for the facilities, which shall be built in accordance with the specifications;
 - d. Upon completion of the interconnection Facilities Study, and with the agreement of the Interconnection Customer to pay for the Interconnection Facilities and Distribution System Upgrades identified in the interconnection Facilities Study, the EU shall provide the Interconnection Customer with a DGF Interconnection Agreement within 5 business days; and
8. When an EU determines, as a result of the interconnection studies conducted under a Level 3 review, that it is appropriate to interconnect the DGF, the EU shall provide the Interconnection Customer with a DGF Interconnection Agreement. If the Interconnection Request is denied, the EU shall provide a written explanation setting forth the reasons for denial;
9. An Interconnection Customer shall have 30 business days from receipt of the DGF Interconnection Agreement, unless another mutually agreeable time frame is reached, to sign and return the DGF Interconnection Agreement to the EU. If an

Interconnection Customer does not sign the DGF Interconnection Agreement within 30 business days, the Interconnection Request shall be deemed withdrawn unless the Interconnection Customer requests in writing, prior to the expiration of the 30 business-day period, to extend the deadline. The EU may not unreasonably deny the request for extension. When construction is required, the interconnection of the DGF shall proceed according to milestones agreed to by the parties in the DGF Interconnection Agreement. The DGF Interconnection Agreement may not be final until:

- a. The milestones agreed to in the DGF Interconnection Agreement are satisfied;
- b. The DGF is approved by electric code officials with jurisdiction over the interconnection;
- c. The Interconnection Customer provides a Certificate of Completion to the EU. Completion of local inspections may be designated on inspection forms used by local inspecting authorities; and
- d. The Witness Test was successfully completed per the terms and conditions found in the Agreement.

102 An interconnection System Impact Study is not required when the interconnection Feasibility Study concludes there is no Adverse System Impact, or when the study identifies an Adverse System Impact, but the EU is able to identify a remedy without the need for an interconnection System Impact Study.

103 The parties shall use a form of interconnection Feasibility Study agreement approved by the Commission.

Chapter 08: TECHNICAL STANDARDS

100 The technical standard to be used in evaluating all Interconnection Requests under Level 1, Level 2, and Level 3 reviews, unless otherwise provided for in these procedures, is IEEE Standard 1547. IEEE 1547.2, "Application Guide for IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems," shall be used as a guide (but not a requirement) to detail and illustrate the interconnection protection requirements that are provided in IEEE 1547.

Chapter 09: POINT OF COMMON COUPLING

100 To minimize the cost of interconnecting multiple DGFs, the EU or the Interconnection Customer may propose a single PCC for multiple DGFs located at a single site. If the Interconnection Customer rejects the EU's proposal for a single PCC, the Interconnection Customer shall pay the additional cost, if any, of providing a separate PCC for each DGF. If the EU rejects the customer's proposal for a single PCC without providing a written

technical explanation, the EU shall pay the additional cost, if any, of providing a separate PCC for each DGF.

Chapter 10: RECORDS AND REPORTS

100 An EU shall maintain records of the following for a minimum of 3 years:

1. The total number of and the Nameplate Capacity of the Interconnection Requests received, approved and denied under Level 1, Level 2, and Level 3 reviews;
2. The number of Interconnection Requests that were not processed within the timelines established in this rule;
3. The number of Scoping Meetings held and the number of feasibility studies, impact studies, and facility studies performed and the fees charged for these studies;
4. The justifications for the actions taken to deny Interconnection Requests; and

101 An EU shall provide a report to the Commission containing the information required in paragraphs (a)-(d) above, on or before February 1st each year.

Chapter 11: INFORMATION FOR PROSPECTIVE INTERCONNECTIONCUSTOMERS

100 An EU shall designate a contact person and contact information on its website and for the Commission's website for submission of all Interconnection Requests and from whom information on the Interconnection Request process and the EU's EDS can be obtained regarding a proposed DGF. The information shall include studies and other materials useful to an understanding of the feasibility of interconnecting a DGF at a particular point on the EU's EDS, except to the extent that providing the materials would violate security requirements or confidentiality agreements, or otherwise would be contrary to Mississippi or federal law and regulations. In appropriate circumstances, the EU may require execution of a confidentiality agreement prior to release of information about the EU's EDS.

101 When the EU determines that an Interconnection Request is complete, a modification of DGF design by the Interconnection Customer other than a Minor Equipment Modification that is not agreed to in writing by the EU shall require submission of a new Interconnection Request.

Chapter 12: ADDITIONAL TECHNICAL REQUIREMENTS

100 DGFs shall be capable of being isolated from the EU. For Level 2 and Level 3 interconnection, the isolation shall be by means of a lockable, visible-break isolation device whose status is clearly indicated and is accessible by the EU. The isolation device shall be installed, owned and maintained by the owner of the DGF and located between

the DGF and the PCC. A draw-out type circuit breaker with a provision for padlocking at the draw-out position can be considered an isolation device for purposes of this requirement. A draw-out type circuit breaker has a switching device capable of making, carrying and breaking currents under normal and abnormal circuit conditions such as those of a short circuit. A draw-out circuit breaker can be physically removed from its enclosure creating a visible break in the circuit. For the purposes of these regulations, the draw-out circuit breaker shall be capable of being locked in the open, draw-out position. Level 1 interconnections do not require an external isolation device.

- 101 A Level 2 or Level 3 Interconnection Customer may elect to provide the EU access to an isolation device that is contained in a building or area that may be unoccupied and locked or not otherwise readily accessible to the EU, by installing a lockbox provided by the EU that shall provide ready access to the isolation device. The Interconnection Customer shall install the lockbox in a location that is readily accessible by the EU, and the Interconnection Customer shall permit the EU to affix a placard in a location of its choosing that provides clear instructions to EU operating personnel on access to the isolation device. In the event that the Interconnection Customer fails to comply with the terms of this subsection and the EU needs to gain access to the isolation device, the EU shall not be held liable for any damages resulting from any necessary EU action to isolate the Interconnection Customer.
- 102 Any metering necessitated by a DGF shall be installed, operated and maintained in accordance with applicable tariffs. Any such metering requirements shall be clearly identified as part of the DGF Interconnection Agreement executed by the Interconnection Customer and the EU.
- 103 The EU shall design, procure, construct, install, and own any Distribution System Upgrades. The actual cost of the Distribution System Upgrades, including overheads, shall be directly assigned to the Interconnection Customer. The Interconnection Customer may be entitled to financial contribution from any other EU customers who may in the future utilize the upgrades paid for by the Interconnection Customer. Such contributions shall be governed by the rules, regulations, and decisions of the Commission.
- 104 The Interconnection Customer shall design its DGF to maintain a composite power delivery at continuous rated power output at the Point of Common Coupling at a power factor within the power factor range required by the EU's applicable tariff for a comparable load customer. EU may also require the Interconnection Customer to follow a voltage or VAR schedule if such schedules are applicable to similarly situated generators in the control area on a comparable basis and have been approved by the Commission. The specific requirements for meeting a voltage or VAR schedule shall be clearly specified in Attachment 3 of the "Mississippi Distributed Generator Interconnection Rule Level 2 and Level 3 Agreement for Interconnection of Distributed Generator Facilities." Under no circumstance shall these additional requirements for voltage support or reactive power exceed the normal operating capabilities of the DGF. The requirements in this paragraph may be additional to requirements in IEEE 1547.

Chapter 13: DISPUTES

- 100** A party shall attempt to resolve all disputes regarding interconnection as provided in the MDGIR promptly, equitably, and in a good faith manner.
- 101** When a dispute arises, a party may seek immediate resolution through complaint procedures available through the Commission by providing written notice to the Commission and the other party stating the issues in dispute.
- 102** When disputes relate to the technical application of the MDGIR, the Commission may designate a technical consultant to resolve the dispute. Upon Commission designation, the parties shall use the technical consultant to resolve disputes related to interconnection. Costs for dispute resolution conducted by the technical consultant shall be established by the technical consultant and subject to review by the Commission. The EU and the Interconnection Customer shall share equally the costs of an outside arbitrator unless they mutually agree to a different payment arrangement.
- 103** Pursuit of dispute resolution shall not affect an Interconnection Customer with regard to consideration of an Interconnection Request or an Interconnection Customer's Queue Position.

TITLE 39: UTILITIES

PART IV: Mississippi Distributed Generator Interconnection and Net Renewable Generation

Subpart II: Mississippi Net Renewable Generation Rule

Chapter 01: Introduction

- 100 The Mississippi Net Renewable Generation Rule (MsNRG) sets forth technical and procedural requirements for Net Renewable Generation on qualified Distributed Generator Facilities (DGFs). These DGFs are also subject to the requirements of the Mississippi Distributed Generator Interconnection Rule (MDGIR).

Chapter 02: DEFINITIONS

The following capitalized terms, when used in this Rule, shall have the following meanings unless the context clearly indicates otherwise. These definitions are in addition to those found in the MGDIR, which also apply to the MsNRG.

- 100 **“Billing Period”** means the monthly billing period used by an Electric Utility (EU) to measure usage and any excess energy exported by a DGF to the EU, and to bill customers.
- 101 **“Avoided Cost of Wholesale Power”** means the cost to an EU¹ of electric energy that the EU would generate itself or purchase from another source, such as from an organized wholesale power market, but for the purchase from a Renewable Energy Distributed Generation Interconnection Customer (REDGIC). In essence, the avoided cost is the marginal cost to produce or purchase one more unit of electrical energy. When a REDGIC delivers electricity to an EU, the EU will reduce the equivalent amount of electricity that either is generated at its most expensive operating plant that is not running for reliability purposes or is purchased from an organized wholesale power market. For power generated by an EU, the cost avoided consists of the cost of fuel needed to produce that electricity and the corresponding portion of the plant’s operation and maintenance costs and shall include an appropriate average line loss adjustment. For REDGICs with solar PV systems, the Avoided Cost of Wholesale Power and the corresponding average line loss adjustment shall reflect the daytime energy production of a solar PV system. No capacity credit is given as part of the calculation of Avoided Cost of Wholesale Power. For an EU that is a member of a regional transmission organization (RTO), the Avoided Cost of Wholesale Power shall be the average real-time locational marginal price (LMP) calculated by the RTO for the EU’s load zone(s). Such LMP shall include an appropriate average line loss adjustment. For REDGICs with solar PV systems, such LMP and the corresponding average line loss adjustment shall reflect the daytime energy production of a solar PV system.

¹ An EU is an electric utility within the meaning of Miss. Code Ann. section 77-3-3(d)(i) (Supp 2014).

- 102 **“Distributed Generation Benefits Adder”** means an adjustment to be included in the Total Benefits of Distributed Generation for benefits of distributed generation that, while expected to occur, are currently non-quantifiable or difficult to quantify. The Distributed Generation Benefits shall be equal to 2.5 cents per kilowatt hour. To provide sufficient financial certainty to qualifying customers that install DGFs, this Distributed Generation Benefits Adder shall remain in place for a period of twenty-five (25) years from the date the customer begins taking net metering service under the EU’s net metering tariff.
- 103 **“Low-Income Benefits Adder”** means an additional amount to be included in the Total Benefits of Distributed Generation that shall flow to qualifying customers whose household income is at or below 250% of the federal poverty level (or similar requirement proposed by the EU to be approved by the Commission) who is approved to take service under the EU’s net metering tariff. Beginning with the effective date of this rule, the Low-Income Benefits Adder shall be equal to 2 cents per kilowatt hour. To provide sufficient financial certainty to qualifying low income customers that install DGFs, this Low-Income Benefits Adder shall remain in place for a period of twenty-five (25) years from the date the customer begins taking net renewable generation service under the EU’s net metering tariff.
- 104 **“Total Benefits of Distributed Generation”** means the total amount – expressed in cents per kilowatt hour - that shall be credited to EU customers as a result of excess energy exported by a DGF to the EU, which shall include the Avoided Cost of Wholesale Power plus the Distributed Generation Benefits Adder plus, if applicable, the Low-Income Benefits Adder, as further outlined in this rule.
- 105 **“Exit Fee”** means a fee that is paid by a customer that reduces load by using a DGF and is intended to compensate the EU in whole or part for the loss of fixed cost contribution from that customer. Exit fees are not allowed under this Rule, unless otherwise approved by the Commission.
- 106 **“Renewable Energy Distribution Generation Interconnection Customer” or “REDGIC”** is any electricity customer, such as an industrial, large commercial, residential or small commercial customer, that generates electricity on the customer’s side of the meter using a Renewable Energy source. The electricity customer must own or lease the DGF producing the Renewable Energy on the electricity customer’s side of the meter in order to qualify as a REDGIC under this MsNRG, unless otherwise approved by the Commission.
- 107 **“Net Generation”** means measuring the real-time kilowatt-hours supplied by the EU to the REDGIC and the kilowatt-hours produced by the REDGIC’s DGF and exported to the EU over the applicable Billing Period. Net Generation includes the real-time displacement of kilowatt-hours that otherwise would be provided by the EU by kilowatt-hours that were generated by the REDGIC’s DGF. An EU may employ a multi-channel meter for separately measuring the REDGIC’s electric usage and excess

energy exported to the EU. Special metering requirements are obviated with the use of advanced metering infrastructure or “smart meters.”

- 108 “Renewable Energy”** means electric energy produced from solar technologies, wind energy, geothermal technologies, wave or tidal action, hydro-power facilities, and biomass. Any energy derived from fossil fuels is not considered renewable and does not qualify under the MsNRG.
- 109 “Biomass”** means a power source that is comprised of combustible solids or gases from forest products, manufacturing waste, or byproducts; products from agricultural and orchard crops; waste or co-products from livestock and poultry operations; waste or byproducts from food processing; urban wood waste; municipal liquid waste treatment operations; and landfill gas.
- 110 “Meter Aggregation”** involves a REDGIC with more than one customer account taking metered electric service from an EU, where the REDGIC elects to apply any remaining value of excess energy credit after application of excess energy credit to the bill for the customer account associated with an interconnected DGF to bill(s) for eligible additional account(s) (“Additional Meter(s)”) in the priority order specified by the REDGIC.

Chapter 03: NET GENERATION REQUIREMENTS

- 100** This MsNRG sets forth the Net Generation requirements that apply to EUs that have customers who self-generate electricity with Renewable Energy on the customer’s side of the EU’s meter that wish to Net Generate, as indicated by the customer on the Standard Application. These customers are referred to as REDGICs in this Rule.
- 101** All EUs shall offer Net Generation to any customer that seeks to generate electricity on the customer’s side of the EU’s meter using Renewable Energy sources, provided:
1. For residential customers, Net Generation nameplate alternating current capacity of the aggregated DGFs at the customer’s premises shall be limited to 20 kW and shall meet the requirements of the MDGIR;
 2. For non-residential customers, Net Generation nameplate alternating current capacity for the aggregate DGFs at the customer’s premises shall be limited to 2 MW and shall meet the requirements of the MDGIR.
 3. In cases where Battery Energy Storage Systems (“BESS”) are paired with a DGF, the capacity of the BESS will not affect the total nameplate capacity limits of a customer’s DGF under this MsNRG.
- 102** All EUs shall offer Meter Aggregation to any REDGIC customer that seeks to generate electricity on the customer’s side of the EU’s meter using Renewable Energy sources, provided:

1. For Meter Aggregation customers, nameplate alternating current capacity of the aggregate DGFs at the customer's premises shall be limited to 3 MW and shall meet the requirements of the MDGIR.
 2. In cases where Battery Energy Storage Systems ("BESS") are paired with a DGF, the capacity of the BESS will not affect the total nameplate capacity limits of a customer's DGF under this MsNRG.
 3. The REDGIC must notify the EU of its request for Meter Aggregation in writing and must provide a list of account numbers, in the REDGIC's preferred order of priority, to determine eligibility as an Additional Meter. The list of accounts and the priority order may not change more than once in a 12-month period.
 4. To be eligible, each Additional Meter included in a Meter Aggregation request must be located on the same physical property or within the same EU service territory of the DGF, must be the same customer as the account associated with the DGF, and must take metered service from the EU.
 5. The customer account physically supplied by the DGF cannot also be an Additional Meter and an Additional Meter cannot have a DGF associated with it.
 6. Billing for all customer accounts will be subject to the Commission's MsNRG as well as provision of the applicable base rate schedules and riders. Customers participating in Meter Aggregation may not also have collective billing.
- 103** EUs may seek Commission approval to refuse additional net generation requests if and when the total Net Generation alternating current capacity in kW, as reported through these requirements, exceeds at any time 4 percent of the EU's total system peak demand expressed in kW recorded during the prior calendar year.
- 104** Each EU shall develop a tariff for Net Generation and interconnection policies in concordance with this MsNRG and the MDGIR. Each EU shall make Net Generation available to eligible REDGICs on a first-come, first-served basis.
- 105** An EU shall provide Net Generation at non-discriminatory rates that are identical, with respect to rate structure and level, retail rate components, and any monthly fixed charges, to the rates that a REDGIC would be charged if not a REDGIC, unless otherwise approved by the Commission.
- 106** In each Billing Period, energy supplied to the REDGIC from the EU as recorded on the EU's bi-directional net meter or smart meter will be billed using appropriate commission-approved rate and rider schedules. This provision means that energy self-supplied by the REDGIC, up to the amount supplied from the EU to the REDGIC (e.g., through the recording of meter Channel 1) will be credited to the REDGIC at the full

retail rate (i.e., effectively displacing energy supplied from the EU). During that same Billing Period, any excess energy supplied from the REDGIC to the EU and recorded on the EU's bi-directional net meter in kWh (e.g., through meter Channel 2) will be credited on the REDGIC's bill at the applicable Total Benefits of Distributed Generation expressed in cents per kWh and shall be accounted for through the EU's fuel adjustment clause. The customer's monthly bill will be the total of billing for any usage (i.e., as recorded on meter Channel 1) subject to any customer charge and/or minimum bill provisions in the EU's rate and rider schedules less any credit due to the customer from excess energy exported to the EU (i.e., as recorded on meter Channel 2). If the sum total of the monthly bill is negative, any such amount will be carried over to the next Billing Period and applied to any charges arising during the subsequent Billing Period.

- 107 Beginning with the effective date of this rule, Total Benefits of Distributed Generation shall be equal to the Avoided Cost of Wholesale Power plus the Distributed Generation Benefits Adder. Further, the Distributed Generation Benefits Adder shall be equal to 2.5 cents/kWh. This amount may be modified upward or downward at any time by order of this Commission, should the Commission find it is in the public interest to do so. Within sixty (60) days of the effective date of this rule, each EU shall file with the Commission revised net generation tariffs consistent with the provisions of this revised rule for consideration and approval by the Commission.
- 108 Each new Billing Period shall begin with zero kWh credits to the REDGIC; however, subject to the provisions above, the customer may carry over any value of energy credit arising from the prior Billing Period(s). When a customer closes his or her account with the EU, if the REDGIC has accumulated a dollar balance as a result of excess energy delivered to the EU, any such balance, net of costs owed to the EU, shall be paid to the REDGIC.
- 109 Credit for any excess energy exported to the EU shall not be applied to reduce any fixed monthly customer charges or minimum bill provisions imposed by the EU under Commission-approved rate and rider schedules.
- 110 An EU shall offer a REDGIC the choice of a time differentiated energy tariff rate or a non-time-differentiated energy tariff rate, if the EU offers the choice to customers in the same rate class as the REDGIC. If a REDGIC uses a retail billing arrangement that has time-differentiated rates, the EU shall net any production from the DGFs against the customer's consumption within the same time-of-use period in the Billing Period and any excess energy exported to the EU will be credited as described above.
- 111 Any renewable energy credits (RECs) created by the REDGIC are and shall remain the property of the REDGIC, unless otherwise approved by the Commission. The EU shall not charge any back-up, standby, or Exit Fees to a REDGIC, unless otherwise approved by the Commission.

- 112 An EU shall not charge a REDGIC any fee or charge, or require additional equipment, insurance or any other requirement, unless the fee, charge, or other requirement is specifically authorized in this MsNRG or the MDGIR, or the fee would apply to other customers in the same rate class that are not REDGICs, or unless otherwise approved by the Commission.
- 113 All REDGICs must be electrically interconnected with their EU pursuant to the provisions of the MDGIR. All rules and regulations for interconnected DGFs within the MDGIR apply to REDGICs. Any Distribution System Upgrades, including additional equipment needed that is associated with the export of electricity, shall be at the REDGIC's expense, per the MDGIR.
- 114 As a further requirement under this rule, each EU shall file with the Commission within three months of the effective date of this revised rule the EU's updated plan to publicize and inform its customers, whether through a website, a bill insert, or other form of communication, of the opportunities available to interconnect DGFs and receive compensation for excess energy delivered to the grid.
- 115 Nothing in this document shall abrogate any person's obligation to comply with all applicable Federal or State laws, rules or regulations, including the MDGIR.

Chapter 04: METERS AND METERING

- 100 A REDGIC shall be equipped with metering equipment that can measure the flow of electricity in each direction at the same time. This may be accomplished through the use of advanced metering infrastructure, or a single bi-directional meter that records customer usage as well as excess energy exported to the EU (e.g., energy supplied to the customer net of the output of the REDGIC is measured on Channel 1 and excess energy supplied by the REDGIC to the EU in excess of the customer's requirements is measured on Channel 2).
- 101 An EU may choose to use an existing electric revenue meter if the following criteria are met:
1. The meter is capable of measuring the flow of electricity both into and out of the REDGIC at the same time; and
 2. The meter is accurate to within plus or minus five percent when measuring excess energy flowing from the REDGIC to the EU.
- 102 If the REDGIC's existing electric revenue meter does not meet the requirements above, the EU shall install a new revenue meter for the REDGIC, at the REDGIC's expense, within 10 business days after the interconnection agreement is executed and approved. If the EU offers a time-differentiated rate chosen by the REDGIC, the meter shall have the capability to appropriately record energy flows in each direction during any time-differentiated period.

- 103 Any subsequent revenue meter change will be at the EU's expense, meaning such meter expense will not be charged to an individual REDGIC but shall become part of the EU's overall cost of service and subsequent revenue requirement.

Chapter 05: REPORTING REQUIREMENTS

- 100 Each EU with one or more REDGICs connected to its grid shall submit to the Mississippi Public Service Commission a Net Renewable Generation report on or before March 1st of each calendar year. The report shall include the following information regarding REDGICs during the reporting period:
1. The total energy expressed in kilowatt-hours supplied to the EU's grid by REDGICs and a description of any estimation methodology used;
 2. The total number of REDGICs that were paid for excess energy exported to the EU at the end of any Billing Period(s) during the prior calendar year;
 3. The total dollar amount by month that the EU paid to REDGICs for excess energy exported to the EU during the prior calendar year;
 4. The total number of net generation DGFs by resource type that were interconnected at the end of the prior calendar year;
 5. The total rated nameplate alternating current generating capacity of net metering DGFs installed during the prior calendar year broken out by resource type; and
 6. The percentage of the EU's total system peak demand from the prior calendar year represented by the total rated nameplate alternating current generating capacity of net metering DGFs.
 7. The total number of REDGICs who received the Low-Income Benefits Adder that calendar year.
- 101 For purposes of these reporting requirements, any estimates shall be made using Commission-approved protocols unless no such protocols are available, in which case the estimates shall be accompanied by detailed calculations demonstrating how the estimates were made.

Chapter 06: INTERAGENCY WORKING GROUP

- 100 In an effort to foster continued monitoring and consideration of the fairness and efficacy of this Rule, the joint working group previously established between representatives of the Commission, the Mississippi Public Utilities Staff, the Office of the Mississippi Attorney General, and other qualified stakeholders shall continue to meet bi-annually to

identify and discuss issues related to net generation that may warrant further Commission attention and/or review. Members of the Commission Staff and Public Utilities Staff who participated in the working group shall present any joint recommendations on such issues to the Commission by January 30th each year.

Chapter 07: REOPENER

- 100** The Commission may, in its discretion, open a new docket to review and revise the MsNRG to the extent it deems necessary, either five years from the effective date of this Revised Rule, or when the total Net Generation alternating current capacity in kW, as reported through these requirements, exceeds 4 percent of the EU's total system peak demand as expressed in kW recorded during the prior calendar year, whichever occurs first.

Exhibit "B"

Public K-12 Solar for Schools

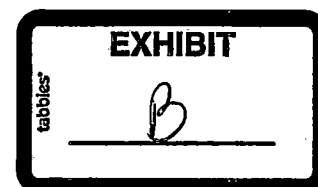
Three options listed below shall be available to Public School Districts, a list of which is curated by the Mississippi Department of Education and as reported by the School District to the Investor-Owned Electric Utility ("IOU").

General Guidance

- A single School District may participate in any combination of the three options, but no participating School District can exceed a total amount of 3MWs AC from the combination of options.
- The capacity limitation per School District shall be based on the lessor of the solar capacity necessary to not exceed 110% of the aggregate annual usage of the School District's meters served by the IOU or 3MWAC.
- The total capacity (MWAC) associated with the combination of all three options of all participating School Districts shall be combined with the total capacity associated with net generation, or any similar or related Commission approved program, in determining that distribution level solar capacity equals or exceeds 4% of the IOU's retail peak load. IOUs may seek Commission approval to refuse additional net generation requests if and when the total Net Generation alternating current capacity in kW, as reported through these requirements, exceeds at any time 4 percent of the EU's total system peak demand expressed in kW recorded during the prior calendar year.

Option I – Solar School Power Purchase Agreements

- Third Party Solar Developer would negotiate the Solar School Power Purchase Agreement ("PPA") cost with the School District, and the IOU would pay the Third Party Solar Developer the negotiated rate, which the IOU would in turn collect from the School District.
- IOU would credit the School District the excess energy at avoided cost rate approved by the Commission for net renewable generation, plus 4.5 cents (2.5 cents Distributed Generation Benefits Adder plus a school adder of 2.0 cents.)
- Only a single PPA may be associated with each School District.
- The solar facility supplying the power must be located in the county/counties of the School District and be physically interconnected with the IOU's distribution system.
- PPA life would be 25 years, which is the reported life of the solar facility, pursuant to a PPA form approved by the Commission.
- PPAs shall be executed on a first-come-first-served basis.



Option II – School District-Owned Behind the Meter Net Renewable Generation with Public Schools Adder and Export Credit Distribution Among Accounts (“Credit Distribution”)

- Allows all metered school accounts served by the IOU and listed on a Standard Application Form (subject to the 3MWAC and 110% of aggregated annual usage limitations) to participate in a School District-Owned solar facility as outlined herein.
- The solar facility output would first be allocated to a single school meter physically connected to the solar facility for net renewable generation purposes (the “primary meter”).
- The IOU shall then allocate the dollar credits resulting from net excess energy that exceeds the load of the primary meter account over the course of the monthly billing period (i.e., any energy exceeding the usage of the primary meter account multiplied by the applicable credit rate) to the remaining school accounts listed on the Standard Application Form (“the additional meters”).
- Solar facility must be built within the IOU’s Certificated Area and interconnected to the IOU’s distribution system, and the solar facility must be electrically connected to the primary meter.
- The IOU shall credit the primary meter and additional meter accounts for excess energy at avoided cost rate approved by the Commission for net generation, plus 4.5 cents (2.5 cents Distributed Generation Benefits Adder plus school adder of 2.0 cents).

Option III – School District Owned Behind the Meter Net Renewable Generation at Avoided Cost Rate Approved by the Commission for Net Renewable Generation, plus 4.5 cents (2.5 cents Non-Quantifiable Benefits Adder Plus School Adder of 2.0 Cents)

- Option III otherwise shall be subject to the Commission’s Net Renewable Generation Rules and implementing Orders and Rate Schedules.