



**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

*In the Matter of:*

<b>ELECTRONIC APPLICATION OF</b>	)	
<b>BIG RIVERS ELECTRIC CORPORATION</b>	)	<b>Case No.</b>
<b>FOR APPROVAL OF AMENDMENT</b>	)	<b>2022-00296</b>
<b>TO POWER PURCHASE AGREEMENT</b>	)	

**APPLICATION**

**and**

**APPLICATION EXHIBITS**

**FILED: September 22, 2022**

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<b>TO POWER PURCHASE AGREEMENT</b>	)	

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**APPLICATION**

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1. Big Rivers Electric Corporation (“*Big Rivers*”) files this Application pursuant to KRS 278.020(1), KRS 278.300, and 807 KAR 5:001 and hereby requests that the Kentucky Public Service Commission (“*Commission*”) enter an order approving an amendment (“*Amendment No. 1*”) to the Power Purchase Agreement between Big Rivers and Unbridled Solar, LLC, (“*Unbridled Solar*”) formerly known as Henderson Solar, LLC, entered on May 26, 2020 (the “*Unbridled PPA*” or “*PPA*”). The Unbridled PPA was one of three renewable energy-solar power purchase agreements (collectively, the “*Solar Contracts*”) originally approved by the Commission by Order dated September 28, 2020, in

1 Case No. 2020-00183.<sup>1</sup> The other two Solar Contracts are between Big Rivers and  
2 subsidiaries of the AES Corporation (“AES”).

3 2. In support of its Application, Big Rivers states as follows:

4 **INTRODUCTION**

5 3. The Applicant, Big Rivers, is a rural electric cooperative corporation  
6 organized pursuant to KRS Chapter 279. Its full name is Big Rivers Electric  
7 Corporation. Big Rivers’ mailing address is P.O. Box 24, Henderson, Kentucky  
8 42419-0024, and its street address is 201 Third Street, Henderson, Kentucky  
9 42420. Big Rivers’ address for electronic mail service is [regulatory@bigrivers.com](mailto:regulatory@bigrivers.com).

10 4. Big Rivers owns generating assets and purchases, transmits and  
11 sells electricity at wholesale. Its principal purpose is to provide the wholesale  
12 electricity requirement of its three distribution cooperative members: Jackson  
13 Purchase Energy Corporation, Kenergy Corp., and Meade County Rural Electric  
14 Cooperative Corporation (“*Meade County RECC*”) (collectively, the “*Members*”).  
15 The Members in turn provide retail electric service to approximately 121,000  
16 consumer/retail members located in 22 western Kentucky counties: Ballard,  
17 Breckenridge, Caldwell, Carlisle, Crittenden, Daviess, Graves, Grayson, Hancock,  
18 Hardin, Henderson, Hopkins, Livingston, Lyon, Marshall, McCracken, Mclean,  
19 Meade, Muhlenberg, Ohio, Union and Webster.

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<sup>1</sup> *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval of Solar Power Contracts*, P.S.C. Case No. 2020-00183, Order (Sept. 28, 2020).



1 County, Kentucky, (the “*Unbridled Project*”)<sup>4</sup> in consideration for the contract  
2 price per MWh of energy. A copy of the original Unbridled PPA is attached as  
3 Exhibit 1 to this Application.<sup>5</sup>

4       9.       Subsequent to the Commission’s approval of the Solar Contracts,  
5 solar development projects across the country began experiencing numerous  
6 issues, including significant delays in the interconnection process, cost increases,  
7 labor shortages, and difficulty in obtaining solar panels due to supply chain  
8 disruptions and an investigation by the U.S. Commerce Department into whether  
9 foreign solar panel makers were circumventing import tariffs. Due to these  
10 challenges, both NGR on behalf of Unbridled Solar and AES approached Big  
11 Rivers and indicated they were unwilling to move forward with their projects  
12 under the terms of the Solar Contracts.

13       10.       Big Rivers then began negotiating, or attempting to negotiate,  
14 amendments to the Solar Contracts. NGR had indicated that it was willing to  
15 walk away from its PPA with Big Rivers and forfeit the security that it had  
16 provided. Big Rivers and NGR were able to negotiate Amendment No. 1 to  
17 preserve much of the economic benefit to Big Rivers, which is significantly more  
18 than the amount of credit support that would be forfeited. A copy of the  
19 proposed Amendment No. 1 is attached to this Application, as Exhibit 2.

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<sup>4</sup> On June 4, 2021, the Kentucky State Board of Electric Generation and Transmission Sitting Board conditionally granted Unbridle Solar a certificate to construct the solar electric generating facility. See P.S.C. Case No. 2020-00242.

<sup>5</sup> A copy of the Unbridled PPA was also attached as Exhibit 1 to Big Rivers’ Application filed in Case No. 2020-00183.



1           16.     Under Amendment No. 1, Unbridled Solar will file a Provisional  
2 GIA, which will allow Unbridled Solar to interconnect without having completed  
3 the traditional interconnection process. A risk in filing a Provision GIA is that  
4 MISO could order a curtailment of the Facility. Amendment No. 1 adds a new  
5 Section 4.4.3, titled Potential Provisional GIA Curtailment to the PPA. Under  
6 this new section, in the event that the Facility's Net Output is curtailed in  
7 connection with a Provisional GIA, Big Rivers will use commercially reasonable  
8 effort to assist Unbridled Solar in mitigating or reducing any adverse effects of  
9 such limitations or restrictions.

10           17.     Under Section 5.2.2 of Amendment No. 1, Big Rivers assumes  
11 responsibility for all "Network Upgrade Costs," while Unbridled Solar remains  
12 responsible for all "Interconnection Facilities," as those terms are defined in the  
13 MISO tariff. Big Rivers conservatively estimates that the Network Upgrade  
14 Costs will be approximately \$5 million.

15           18.     The credit support Unbridled Solar is required to provide during the  
16 period prior to Commercial Operation [REDACTED]

17           19.     The Contract Price in Exhibit 5.1 of the Unbridled PPA will be  
18 amended from \$29.60/MWh to \$38.10/MWh.

19           20.     There are other minor changes to incorporate the above changes, or  
20 to clarify the existing PPA.

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**THE AMENDED UNBRIDLED PPA STILL  
SATISFIES KRS 278.300 AND KRS 278.020(1)**

21. As discussed above, the Commission reviewed the original Unbridled PPA pursuant to KRS 278.300 and KRS 278.020(1).

22. The purpose of the Unbridled PPA has not changed, i.e. the PPA serves to meet Big Rivers’ obligations to provide competitive and reliable wholesale power to meet the needs of Big Rivers’ Members and cost-effective shared services desired by the Members. As such, the proposed amended Unbridled PPA remains to be for a lawful object within Big Rivers’ corporate purpose.

23. Further, the renewable solar energy available through the Unbridled PPA is still needed to satisfy Big Rivers’ obligations to provide solar power to Meade County RECC necessary for Meade County RECC to supply solar power to Nucor Corporation (“Nucor”). Additionally, Big Rivers has a short-term capacity deficit in 2025-26, and this shortfall would increase slightly absent the Unbridled Solar PPA.

24. The proposed amended Unbridled PPA remains a cost-effective source of energy, and it is reasonable for Big Rivers to enter into Amendment No. 1. As fully discussed in the Eacret Testimony, based on Big Rivers’ economic analysis, the proposed amended purchase price for the solar energy compares favorably to market prices over the 20-year term of the Unbridled PPA. The



1 projected net present value of the benefit to our Members created by the proposed  
2 amended PPA is [REDACTED].<sup>6</sup>

3 25. The proposed amended Unbridled PPA remains to be (1) for a lawful  
4 object within the corporate purposes of Big Rivers and necessary; (2) appropriate  
5 for, and consistent with, the proper performance by Big Rivers of its service to the  
6 public, and will not impair its ability to perform that service; and (3) reasonably  
7 necessary and appropriate for such purpose.<sup>7</sup>

8 26. Considering the economic value to Big Rivers' Members and the  
9 other significant benefits of the amended Unbridled PPA discussed above, there is  
10 a clear need for the PPA and the purchase will not result in a wasteful duplication  
11 of facilities. As such, the Commission should grant Big Rivers' request for  
12 approval of Amendment No. 1 to the Unbridled PPA.

13 **FILING REQUIREMENTS OF 807 KAR 5:001 SECTIONS 15 AND 18**

14 27. Pursuant to 807 KAR 5:001 Section 18, Big Rivers states as follows:

15 a. A general description of Big Rivers' property and the field of  
16 its operation, together with a statement of the original cost of  
17 the same and the cost to Big Rivers are attached hereto as  
18 Exhibit 4.

19 b. Big Rivers will issue no stock or bonds in connection with the  
20 issuances of indebtedness described in this Application.

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<sup>6</sup> See Exhibit Eacret-7 to the Direct Testimony of Mark Eacret.

<sup>7</sup> See KRS 278.300.

- 1           c.    No property is to be acquired, constructed, improved, or  
2                    extended by Big Rivers in connection with the Solar Contracts,  
3                    nor has Big Rivers entered into contracts for any of those  
4                    purposes. Accordingly, there are no projects for which Big  
5                    Rivers has developed maps or plans relating to the proposed  
6                    evidences of indebtedness.
- 7           d.    Big Rivers will not discharge or refund any obligations in  
8                    connection with the amended Unbridled PPA.
- 9           e.    A financial exhibit is attached hereto as Exhibit 5.
- 10          f.    A copy of Big Rivers' Indenture dated July 1, 2009, is attached  
11                    as Exhibit 7 to the Application of Big Rivers Electric  
12                    Corporation for Approval to Issue Evidences of Indebtedness  
13                    in Case No. 2009-00441.

14          28.    In light of the nature of Big River's Application, and that Big Rivers  
15 will not be constructing any facilities, the other filing requirements set forth in  
16 807 KAR 5:001 Sections 15 and 18 are inapplicable. To the extent necessary, Big  
17 Rivers requests permission, pursuant to 807 KAR 5:001 Section 22 and for good  
18 cause shown, to deviate from the remaining filing requirements of 807 KAR 5:001  
19 due to their inapplicability.

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**CONCLUSION**

WHEREFORE, Big Rivers respectfully requests that the Commission enter an Order:

- 1. Approving Amendment No. 1 to the Unbridled PPA; and
- 2. Granting all other relief to which Big Rivers may be entitled.

On this 22nd day of September, 2022.

Respectfully submitted,  
  
*/s/ Tyson Kamuf*  

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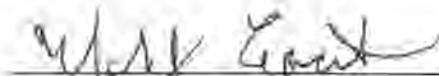
**BIG RIVERS ELECTRIC CORPORATION**

**ELECTRONIC APPLICATION OF  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF AMENDMENT TO  
POWER PURCHASE AGREEMENT**

**Case No. 2022-00296**

**APPLICATION VERIFICATION**

I, Mark J. Eacret, Vice President of Energy Services, hereby state that I have read the foregoing Application, including the exhibits thereto, and that the statements contained therein are true and correct to the best of my knowledge, information, and belief, on this 22 day of September 2022.



Mark J. Eacret

Vice President of Energy Services  
Big Rivers Electric Corporation

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Mark J. Eacret on this the 22 day of September, 2022.



Notary Public, Ky. State at Large  
My Commission Expires 1-14-2026

# KYNP43026

**POWER PURCHASE AGREEMENT**

**(RENEWABLE ENERGY-SOLAR)**

**BETWEEN**

**HENDERSON SOLAR, LLC**

**AND**

**BIG RIVERS ELECTRIC CORPORATION**

**HENDERSON SOLAR PROJECT**

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- Exhibit D Example Calculation of Buyer's Cost to Cover
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- Exhibit 11.4 Form of Memorandum of Power Purchase Agreement
- Exhibit 13 Required Insurance

**POWER PURCHASE AGREEMENT  
(RENEWABLE ENERGY-SOLAR)**

THIS POWER PURCHASE AGREEMENT (RENEWABLE ENERGY-SOLAR) (“**Agreement**”), entered into this 20<sup>th</sup> day of May 2020 (the “**Effective Date**”), is between HENDERSON SOLAR, LLC, a Delaware limited liability company (“**Seller**”), and BIG RIVERS ELECTRIC CORPORATION, a Kentucky rural electric cooperative corporation (“**Buyer**”). Seller and Buyer are sometimes hereinafter referred to collectively as the “**Parties**” and individually as a “**Party**.”

WHEREAS, Seller intends to construct, own, operate and maintain a solar-powered generation facility for the generation of electric energy located in Henderson County, Kentucky with an expected nameplate capacity rating of up to 160 MW (AC) (the “**Facility**”).

WHEREAS, Seller expects that the Facility will deliver to Seller (on average) [REDACTED] [REDACTED] per Contract Year of Net Output and associated Capacity Rights and RECs (as all such terms are hereinafter defined). Seller estimates that the Net Output, Capacity Rights and RECs will be delivered during each Contract Year according to the estimates of monthly output set forth in **Exhibit A**. Except as otherwise provided herein, such Net Output and associated Capacity Rights and RECs shall be sold by Seller exclusively to Buyer. Seller acknowledges that Buyer will include these amounts of Net Output and associated Capacity Rights and RECs in Buyer’s resource planning.

WHEREAS, Seller desires to sell and deliver to Buyer the Net Output and associated RECs, Ancillary Services and Capacity Rights (as all such terms are hereinafter defined), and Buyer desires to buy the same from Seller in accordance with the terms and conditions hereof.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises set forth below and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, mutually agree as follows:

**SECTION 1  
DEFINITIONS; RULES OF INTERPRETATION**

1.1 Defined Terms. Unless otherwise required by the context in which any term appears, initially capitalized terms used herein have the following meanings:

“**AAA**” is the American Arbitration Association.

“**Abandonment**” means (1) the relinquishment of all possession and control of the Facility by Seller, other than pursuant to a transfer permitted under this Agreement (including as a result of the Lender’s exercise of rights under Financing Documents), or (2) if after commencement of the construction, testing, and inspection of the Facility, and prior to the Commercial Operation Date, there is a complete cessation of the construction, testing, and inspection of the Facility for ninety (90) consecutive days by Seller and Seller’s contractors, but only if such relinquishment or cessation is not caused by or attributable to an Event of Default of, or request by, Buyer, or an event of Force Majeure.

“AC” means alternating current.

“Administrator” is defined in Section 20.3.

“Affiliate” means, with respect to any entity, each entity that directly or indirectly controls, is controlled by, or is under common control with, such designated entity, with “control” meaning the possession, directly or indirectly, of the power to direct management and policies, whether through the ownership of voting securities (if applicable) or by contract or otherwise. Notwithstanding the foregoing, with respect to Buyer, Affiliate does not include any member of its Board of Directors or any member of Buyer.

“Agreement” is defined in the Recitals.

“Ancillary Services” means any of the services identified by the System Operator or the Tariff as “Ancillary Services”. Ancillary Services does not include any cost recovery available to Seller from the Transmission Provider, Electric System Authority or other similar authority under a FERC-filed reactive power rate (and rights to such cost recovery shall remain with Seller).

“As-Built Supplement” is a supplement to be added to **Exhibit 6.1** that describes the Facility as actually built, pursuant to Section 6.1 and includes an American Land Title Association survey of the Premises and the MWP at the time of Commercial Operation.

“Business Day” means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday. A Business Day shall begin at 8:00 a.m. and end at 5:00 p.m. PT. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent, or by whom the notice, payment or delivery is received, as the context requires.

“Buyer” is defined in the Recitals.

“Buyer Indemnitees” is defined in Section 12.1.1.

“Buyer’s Cost to Cover” means the positive difference, if any, between (a) the sum of (i) the mathematical average of the relevant DALMP prices over each day for which the determination is being made (the “Average DALMP Price”), plus (ii) (A) the price of replacement RECs or (B) if, after using commercially reasonable efforts to do so, Buyer is unable to replace RECs, the REC Price Component, minus (b) the Contract Price. If on a given day (or Contract Year in the case of calculating Output Shortfall) the difference between (a) and (b) referenced above is zero or negative, then Buyer’s Cost to Cover shall be zero dollars (\$0), and Seller shall have no obligation to pay any amount to Buyer on account of Section 6.12.2 or Section 11.2.1 with respect to such day (or Contract Year in the case of calculating Output Shortfall). For any days prior to the Commercial Operation Date, the Contract Price shall be utilized for purposes of clause (b). An Example illustrating the calculation of Buyer’s Cost to Cover under certain stated assumptions is set forth in **Exhibit D**.

“Buyer’s Interest” means one hundred percent (100%) of the Net Output, Ancillary Services, RECs and Capacity Rights from the Facility.

**“Buyer’s System”** means the electrical system owned, operated or maintained by Buyer at the Point of Delivery.

**“Calculation Period”** means each measured interval integrated into an hour during the Term.

**“CAMD”** means the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any state or federal entity with jurisdiction over a program involving transferability of RECs.

**“Capacity Rights”** means any current or future defined characteristic, certificate, benefit, product, tag (but not RECs), credit, attribute, or accounting construct, including any of the same counted towards any current or future capacity, resource adequacy or reserve requirements, associated with the electric generation capability and capacity of the Facility or the Facility’s capability and ability to produce energy. Capacity Rights do not include PTCs, ITCs, or any Tax Credits.

**“Commercial Operation”** means that not less than the Expected Nameplate Capacity Rating of the Facility is fully operational and reliable and the Facility is fully interconnected, integrated and synchronized with the System and Buyer’s System, as applicable, all of which shall be Seller’s responsibility to receive or obtain, and, without limiting Seller’s other obligations hereunder, which occurs when all of the following events (i) have occurred, and (ii) remain simultaneously true and accurate as of the date and moment on which Seller gives Buyer notice that Commercial Operation has occurred:

(1) Buyer has received a certificate addressed to Buyer from an officer of Seller familiar with the Facility certifying that (a) the Nameplate Capacity Rating of the Facility is at least ninety percent (90%) of the Expected Nameplate Capacity Rating; (b) the Facility is able to generate electric power reliably in amounts expected by this Agreement and in accordance with all other terms and conditions hereof; (c) start-up testing of the Facility has been completed; (d) all Permits to construct or operate the Facility in compliance with all Requirements of Law and this Agreement have been obtained and are in full force and effect; (e) all conditions set forth in subsections (1) through (6) hereof have been met; (f) Seller is in compliance with the terms and conditions of this Agreement in all material respects; and (g) all Required Facility Documents and Financing Documents are in full force and effect and there are no defaults or events that, with the passing of time or the giving of notice, or both, would constitute a default thereunder.

(2) Seller has successfully completed all testing of the Facility that is required by the Financing Documents, Required Facility Documents, the Permits, the Generation Interconnection Agreement, Seller’s operating agreements, manufacturers’ warranties for the commencement of Commercial Operations at the Facility and all other Requirements of Law.

(3) Buyer has received a certificate addressed to Buyer from a Licensed Professional Engineer stating that, except with respect to the portion of the Nameplate Capacity Rating that remains to be completed pursuant to paragraph (1) above, (a) in

accordance with the Generation Interconnection Agreement, all required Interconnection Facilities have been constructed, (b) all required interconnection tests have been completed, (c) the Facility is physically interconnected with the System and Buyer's System, as applicable, in conformance with the Generation Interconnection Agreement and able to deliver energy consistent with the terms of this Agreement, (d) the Facility is fully integrated and synchronized with the System and Buyer's System, as applicable, and (e) the System Operator has designated the Facility as an Intermittent Resource.

(4) Seller has provided Buyer copies of the Required Facility Documents reasonably requested by Buyer prior to Seller's notice of Commercial Operation; *provided, however*, that Seller may redact or omit confidential or commercial terms from non-public Required Facility Documents.

(5) The Facility has demonstrated the reliability of its communications systems and communications with Buyer's system control center to the reasonable satisfaction of Buyer or Buyer's designee.

(6) Seller has provided the Credit Support required pursuant to Section 8.1.

**"Commercial Operation Date"** means the date that Commercial Operation is achieved for the Facility.

**"Confidential Business Information"** is defined in Section 23.1.

**"Contract Interest Rate"** means the lesser of (a) the highest rate permitted under Requirements of Law and (b) 200 basis points per annum plus the rate per annum equal to the publicly announced prime rate or reference rate for commercial loans to large businesses in effect from time to time quoted by Citibank, N.A. as its "prime rate". If a Citibank, N.A. prime rate is not available, the applicable prime rate shall be the announced prime rate or reference rate for commercial loans in effect from time to time quoted by a bank with \$10 billion or more in assets in New York City, New York, selected by the Party to whom interest is being paid.

**"Contract Price"** means the applicable price, expressed in \$/MWh, stated in Section 5.1.

**"Contract Year"** means a twelve (12) month period commencing at 00:00 hours on January 1 and ending on 24:00 hours on December 31; *provided, however*, that the first Contract Year shall commence on the Commercial Operation Date and end on the next succeeding December 31, and the last Contract Year shall end on the last day of the Term.

**"Controlling Interest"** means more than fifty percent (50%) of outstanding ownership interest, or the power to vote such percentage of ownership interest.

**"Costs"** means, with respect to the non-defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses (including costs incurred in connection with transmission services that would otherwise not have been incurred hereunder) reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace this Agreement, and all reasonable

attorneys' fees and expenses incurred by the non-defaulting Party in connection with this Agreement.

**“Covered Facility”** is defined in Section 11.9.

**“Covered Facility Right of First Offer”** is defined in Section 11.9.

**“Credit Rating”** of any person or entity means the lowest rating assigned to such person or entity's long-term debt or deposit obligations (unenhanced by third-party support) by Fitch, Standard & Poor's and Moody's. If such person or entity has no outstanding long-term debt or deposit obligations, or if no rating is assigned to such obligations, “Credit Rating” shall mean the lowest general corporate credit rating or long-term issuer rating assigned to such person or entity by Fitch, Standard & Poor's or Moody's.

**“Credit Support”** means the credit support to be provided by Seller pursuant to Section 8.

**“Curtailed Energy”** shall be the number of MWh represented by the Potential Energy that is curtailed based on Buyer's instruction to curtail output or that is not dispatched by the Transmission Provider or is otherwise curtailed by the Transmission Provider based upon Buyer's offer(s) submitted to the Transmission Provider, or lack thereof (as further described in Section 4.4.2), less the Net Output actually delivered during the period of curtailment.

**“DALMP”** is Day-Ahead LMP as that term is used in the Tariff.

**“Delay Damages”** means the damages payable by Seller under the circumstances and subject to the limits described in Sections 2.3(a) and 2.4, and for any given day [REDACTED]

[REDACTED] An Example illustrating the calculation of Delay Damages under certain stated assumptions is set forth in **Exhibit B**.

**“Dispatchable Intermittent Resource”** is defined in the Tariff.

**“DPP Phase II”** means Phase II of the Definitive Planning Phase (as defined in Attachment X to the Tariff).

**“EEV”** means Emerald Energy Venture, LLC, a Delaware limited liability company together with its subsidiaries and Affiliates.

**“Effective Date”** is defined in the preamble.

**“Electric System Authority”** means each of NERC, MISO, the GIS, a System Operator, a regional or sub-regional reliability council or authority, and any other similar council, corporation, organization or body of recognized standing with respect to the operations of the electric system in the geographic area in which the Facility is located.

**“Emissions Reduction Credit”** is any credit, allowance or instrument issued or issuable by a Governmental Authority under regulations of the Environmental Protection Agency under the Clean Air Act.

**“Environmental Attributes”** means any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water, which are deemed of value by Buyer. Environmental Attributes include: (a) any avoided emissions of pollutants to the air, soil, or water such as sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and other pollutants; (b) all Emissions Reduction Credits; (c) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gases (GHGs) that have been determined by any Governmental Authority or the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere; and (d) any cryptocurrency, blockchain, and similar or related matters, items commodities, tokens, or anything of actual, potential, or theoretical value related to, measured by, or associated with anything produced by Facility Output. Environmental Attributes do not include (i) PTCs, ITCs, or other tax incentives existing now or in the future associated with the construction, ownership or operation of the Facility, (ii) matters designated by Buyer as sources of liability, or (iii) any adverse health, safety, wildlife or environmental impacts.

**“Environmental Attribute Reporting Rights”** means the exclusive right of a purchaser of Environmental Attributes to report ownership of Environmental Attributes in compliance with federal or state law, if applicable, and to federal or state agencies or other parties at such purchaser’s discretion, and includes reporting under Section 1605(b) of the Energy Policy Act of 1992, or under any present or future domestic, international, or foreign emissions trading program or renewable portfolio standard.

**“Environmental Contamination”** means the introduction or presence of Hazardous Materials at such levels, quantities or location, or of such form or character, as to constitute a violation of federal, state or local laws or regulations, or to present a material risk that as a consequence of the application of federal, state or local laws and regulations that (a) the Premises will not be available or usable for the purposes contemplated by this Agreement or (b) the potential resulting liabilities could impair Seller’s ability to meet its obligations hereunder.

**“Event of Default”** is defined in Section 11.1.

**“EWG”** means an “exempt wholesale generator,” as defined under PUHCA.

**“Example”** means an example of certain calculations to be made hereunder. Each Example is for purposes of illustration only and is not intended to constitute a representation, warranty or covenant concerning the matters assumed for purposes of each Example.

**“Expansion Energy”** is defined in Section 20.5.1.

**“Expected Energy”** means [REDACTED] of Net Output during the first Contract Year, measured at the Point of Delivery; [REDACTED] of Net Output during the second Contract Year, measured at the Point of Delivery; and thereafter, Expected Energy will be the annual generation predicted by the Solar Performance Modeling Program multiplied by the measured plane of array irradiance derived from the same satellite data source used in the Solar Performance Modeling Program divided by the Solar Performance Modeling Program’s expected plane of array irradiance, taking into account an annual degradation factor of 0.5% per Contract Year. Seller



estimates that the Net Output will be delivered during each calendar year according to the estimates of monthly output set forth in **Exhibit A**. Seller acknowledges that Buyer will include Buyer's Interest in Buyer's resource planning. Buyer acknowledges that solar exposure is a variable resource and that the Facility's actual annual output of Net Output and RECs in the ordinary course of any given Contract Year will be subject to variation caused by differences in the solar exposure at the Facility from Contract Year to Contract Year; provided, however, that nothing in this sentence affects or reduces Seller's obligations hereunder.

**"Expected Nameplate Capacity Rating"** means 160 MW (AC), the expected maximum instantaneous generation capacity of the Facility.

**"Facility"** is defined in the Recitals and is more fully described in attached **Exhibit 6.1** and includes the photovoltaic power generating equipment, including panels, arrays, tracking system, and inverters, and all other equipment, devices, associated appurtenances owned, controlled, operated and managed by Seller in connection with, or to facilitate, the production, generation, transmission, delivery, or furnishing of electric energy by Seller to Buyer and required to interconnect with the System and Buyer's System, as applicable.

**"Facility Revenue Meter"** means all metering equipment installed or to be installed at the Generating Facility pursuant to this GIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**"FASB"** means the Financial Accounting Standards Board.

**"FERC"** means the Federal Energy Regulatory Commission.

**"FIN 46R"** means the FASB revised Interpretation No. 46(R), Consolidation of Variable Interest Entities.

**"Final System Impact Study"** has the meaning given to it in Attachment X to the Tariff.

**"Financing"** means any of the following by Seller's financing parties: (a) lending money, extending credit, purchasing notes or providing loan guarantees (whether directly to Seller or to an Affiliate of Seller) as follows: (i) for the construction, interim or permanent financing or refinancing of the Facility; (ii) for working capital or other ordinary business requirements of the Facility (including the maintenance, repair, replacement or improvement of the Facility); (iii) for any development financing, bridge financing, credit support, credit enhancement or interest rate protection in connection with the Facility; or (iv) for any capital improvement or replacement related to the Facility; or (b) participating as an tax equity investor with respect to the Facility.

**"Financing Documents"** is defined in the Lender Consent and, for purposes of this Agreement, includes the documents associated with any tax equity financing and the loan and credit agreements, notes, bonds, indentures, security agreements, lease financing agreements, mortgages, deeds of trust, interest rate exchanges, swap agreements and other documents relating to the development, bridge, construction or permanent debt financing for the Facility, including any credit enhancement, credit support, working capital financing, or refinancing documents, and any and all amendments, modifications, or supplements to the foregoing that may be entered into

from time to time at the discretion of Seller in connection with development, construction, ownership, leasing, operation or maintenance of the Facility.

**“Fitch”** means Fitch Ratings, Inc.

**“Force Majeure”** is defined in Section 14.1.

**“Forced Outage”** means NERC Event Types U1, U2 and U3, as set forth in attached Exhibit C, and specifically excludes any Maintenance Outage or Planned Outage.

**“Gains”** means, with respect to a non-defaulting Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of this Agreement, determined in a commercially reasonable manner. Gains shall be measured with respect to the Expected Energy over the remainder of the Term (ignoring any early termination of this Agreement).

**“GATS”** means the Generation Attribute Tracking System.

**“Generation Information System”** or **“GIS”** means M-RETS, a state or regional registry, or other present or future applicable system for accounting for and transferring RECs with respect to generation from the Facility.

**“Generation Interconnection Agreement”** means the agreement to be entered into separately between Seller and Interconnection Provider concerning the Interconnection Facilities. **“Generation Interconnection Agreement”** may include, at the option of Seller, any conditional or provisional interconnection agreement with Transmission Provider (as contemplated and described in the Tariff) or any agreement with the Transmission Provider where the Transmission Provider may limit the operational output of the Facility.

**“Generator Operator”** means the entity that operates generating facility(ies) and performs the functions of supplying energy and interconnected operations services.

**“GIS Certificate”** means the certificate representing all or any part of the REC created and accounted for by the GIS.

**“GIS Operating Procedures”** means the operating rules and requirements adopted by the GIS.

**“Government”** is defined in Section 20.3.

**“Governmental Authority”** means any supranational, federal or state authority or other political subdivision thereof, having jurisdiction over Seller, Buyer, the Facility, or this Agreement, including any municipality, township or county, and any entity or body exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including any corporation or other entity owned or controlled by any of the foregoing.

**“Guaranteed Commercial Operation Date”** means the date that is [REDACTED] after the Scheduled Commercial Operation Date.

**“Hazardous Materials”** means any substance, material, gas, or particulate matter that is regulated by any Governmental Authority, as an environmental pollutant or dangerous to public health, public welfare, or the natural environment including protection of non-human forms of life, land, water, groundwater, and air, including any material or substance that is (a) defined as “toxic,” “polluting,” “hazardous waste,” “hazardous material,” “hazardous substance,” “extremely hazardous waste,” “solid waste” or “restricted hazardous waste” under any provision of local, state, or federal law; (b) petroleum, including any fraction, derivative or additive; (c) asbestos; (d) polychlorinated biphenyls; (e) radioactive material; (f) designated as a “hazardous substance” pursuant to the Clean Water Act, 33 U.S.C. §1251 *et seq.*; (g) defined as a “hazardous waste” pursuant to the Resource Conservation and Recovery Act, 42 U.S.C. §6901 *et seq.*; (h) defined as a “hazardous substance” pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §9601 *et seq.*; (i) defined as a “chemical substance” under the Toxic Substances Control Act, 15 U.S.C. §2601 *et seq.*; or (j) defined as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §136 *et seq.*

**“ICCP”** means the Inter-Control Center Communications Protocol.

**“Interconnection Facilities”** means all the facilities installed, or to be installed, for the purpose of interconnecting the Facility to the System and Buyer’s System, as applicable, including electrical transmission lines, line upgrades, transformers, capacitor banks, inductor banks, and associated equipment, substations, relay and switching equipment, and safety equipment.

**“Interconnection Provider”** means Big Rivers Electric Corporation.

**“Intermittent Resource”** is defined in the Tariff.

**“Inverter”** means the equipment installed at the Facility to convert direct current from the Solar Panels to alternating current, as described in **Exhibit 6.1**.

**“Investment Grade”** means a Credit Rating of (a) Baa3 or higher by Moody’s, Inc. and/or (b) BBB- or higher by Standard & Poor’s or Fitch.

**“ITCs”** means the investment tax credits established pursuant to Section 48 of the Internal Revenue Code.

**“Lender”** means any entity other than a Seller Affiliate lending money or extending credit (including any financing lease, monetization of tax benefits, transaction with a Tax Investor (as defined in the Lender Consent), backleverage financing or credit derivative arrangement) to Seller (a) for the construction, term or permanent financing or refinancing of the Facility; (b) for working capital or other ordinary business requirements for the Facility (including for the maintenance, repair, replacement or improvement of the Facility); (c) for any development financing, bridge financing, credit support, credit enhancement or interest rate protection in connection with the Facility; or (d) for the purchase of the Facility and related rights from Seller.

**“Lender Consent”** means a Consent to Collateral Assignment in favor of one or more Lenders and in substantially the form of **Exhibit 8.4**.

**“Liabilities”** is defined in Section 12.1.1.

**“Licensed Professional Engineer”** means a person proposed by Seller and acceptable to Buyer in its reasonable judgment who (1) is licensed to practice engineering in the appropriate engineering discipline for the required certification being made, in the United States, and in all states for which the person is providing a certification, evaluation or opinion with respect to matters or Requirements of Law specific to such state, (2) has training and experience in the engineering disciplines relevant to the matters with respect to which such person is called upon to provide a certification, evaluation or opinion, (3) has no economic relationship, association, or nexus with Seller or its Affiliates, other than, with the prior written consent of Buyer, services previously or currently being rendered to Seller or its Affiliates, and (4) is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. The engineers and engineering firms listed on **Exhibit E** are acceptable to Buyer as “Licensed Professional Engineers”.

**“Locational Marginal Price”** or **“LMP”** means the 5-minute real-time Locational Marginal Price as defined by MISO at the Commercial Pricing Node at the Point of Delivery. Until such time as MISO defines a Commercial Pricing Node near the Facility, the Commercial Pricing Node nearest to the Point of Delivery will be utilized.

**“Losses”** means, with respect to a non-defaulting party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from termination of this Agreement, determined in a commercially reasonable manner. Losses shall be measured with respect to the Expected Energy over the remainder of the Term (ignoring any early termination of this Agreement).

**“Maintenance Outage”** means NERC Event Type MO, as set forth in attached **Exhibit C**, and includes any outage involving at least ten percent (10%) of the Facility’s Nameplate Capacity Rating that is not a Forced Outage or a Planned Outage.

**“Market Participant”** is defined in the Tariff.

**“Maximum Delivery Rate”** means the maximum hourly rate of delivery of Net Output in MWh from the Facility to the Point of Delivery, calculated on the basis of the Net Output delivered in an hour accruing at an average rate equivalent to the actual Nameplate Capacity Rating.

**“Mediation Location”** means Henderson, Kentucky.

**“Mediation Notice”** is defined in Section 24.2(a).

**“Mediation Procedures”** is defined in Section 24.2.

**“Meter Data Management Agent”** means an entity providing meter data to the MISO Meter Data Management System, as that term is used in the Tariff.

**“MISO”** means the Midcontinent Independent System Operator, Inc., or its successor.

“**MISO Rules**” means the policies, rules, guidelines, procedures, standards and criteria applicable to market participants in MISO, including the Tariff, the Operating Agreement, and the MISO manuals.

“**Moody’s**” means Moody’s Investors Services, Inc.

“**M-RETS**” means the Midwest Renewable Energy Tracking System.

“**MW**” means megawatt.

“**MWh**” means megawatt hour.

“**MWp**” means megawatt of direct current (DC) electric capacity.

“**Nameplate Capacity Rating**” means the maximum installed instantaneous generation capacity of the completed Facility, expressed in MW (AC), when operated in compliance with the Generation Interconnection Agreement and consistent with the recommended power factor and operating parameters provided by the manufacturer of the Solar Panels and Inverters, as set forth in a notice from Seller to Buyer delivered prior to the Commercial Operation Date. The Nameplate Capacity Rating of the Facility shall be at least equal to ninety percent (90%) of the Expected Nameplate Capacity Rating and shall not exceed 160 MW (AC).

“**NERC**” means the North American Electric Reliability Corporation.

“**Negative RTLMP Period**” means the period commencing with start of the first Calculation Period in which the RTLMP is zero or negative and ending with the start of the first Calculation Period in which the RTLMP is again positive.

“**Net Output**” means all energy produced by the Facility, exclusive of Station Use, and delivered at the Point of Delivery.

“**Network Upgrade Costs**” is defined in the Tariff and also includes costs and expenses payable to an affected System Operator and defined in and required under the Generation Interconnection Agreement.

“**Offered Assets**” is defined in Section 20.4.1.

“**Off-Peak Hours**” means all hours not classified as On-Peak Hours.

“**Ohio SREC**” means the Solar Renewable Energy Credit market, or successor program (provided the Facility meets the program eligibility criteria), recognized by the state of Ohio.

“**On-Peak Hours**” means the period of time between Hour-ending 0700 Eastern Prevailing Time through and including Hour-ending 2200 Hours Eastern Prevailing Time Monday through Friday excepting New Year’s, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day or if the holiday occurs on a Sunday, the Monday immediately following the holiday.

“**Output**” means all energy produced by the Facility.

**“Output Guarantee”** is defined in Section 6.12.1.

**“Output Shortfall”** is defined in and calculated pursuant to Section 6.12.2(b).

**“Permits”** means all of the permits, licenses, approvals, certificates, entitlements and other authorizations issued by Governmental Authorities required for the construction, ownership or operation of the Facility and occupancy of the Premises, including those specified in **Exhibit F**, and all amendments, modifications, supplements, general conditions and addenda thereto.

**“Planned Outage”** means NERC Event Type PO, as set forth in attached **Exhibit C**, and specifically excludes any Maintenance Outage or Forced Outage.

**“Planning Resource Auction”** or **“PRA”** means an annual auction that is conducted by the Transmission Provider to determine the Auction Clearing Price and the cleared Zonal Resource Credit offers for each Local Resource Zone and External Resource Zone for the applicable Planning Year, as such terms are defined in the MISO Tariff.

**“Point of Delivery”** means the point of interconnection between the Facility and the System and Buyer’s System, as applicable, as specified in the Generation Interconnection Agreement and as further described in **Exhibit 9.2**.

**“Potential Energy”** means the quantity of the energy that Seller is capable of delivering at the Point of Delivery and shall be calculated as the aggregate energy available for delivery at the Point of Delivery using the best-available data obtained through commercially reasonable methods; and shall be dependent upon measured insolation, power curves, Solar Panel availability, and derate(s) and transmission line losses, and any other adjustment (including, as applicable, adjustments based upon time of day) necessary to accurately reflect the Facility’s capability to produce and deliver energy to the Point of Delivery. Potential Energy does not include energy generated by the Facility but used for Station Use.

**“Premises”** means the real property on which the Facility is or will be located, as more fully described on **Exhibit 6.1**.

**“Prevailing Time”** or **“PT”** means Standard Time or Daylight Time, as applicable on the day in question at the Point of Delivery.

**“Prudent Electrical Practices”** means any of the practices, methods and acts engaged in or approved by a significant portion of the independent electric power generation industry for solar facilities of similar size and characteristics or any of the practices, methods or acts, which, in the exercise of reasonable judgment in the light of the facts known or that should reasonably have been known at the time a decision is made, could have been expected to accomplish the desired result at the lowest reasonable cost consistent with law, regulation, permits, codes, standards, equipment manufacturer’s recommendations, reliability, safety, environmental protection, economy, and expedition. Prudent Electrical Practices is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to be a spectrum of possible practices, methods or acts.

**“PTCs”** means production tax credits under Section 45 of the Internal Revenue Code.

“**PUHCA**” means the Public Utility Holding Company Act of 2005, as amended from time to time.

“**PURPA**” means the Public Utility Regulatory Policies Act of 1978, as amended from time to time.

“**QF**” means “qualifying facility” as that term is defined in 18 C.F.R. 292.101(b)(1).

“**Qualified Transferee**” means an U.S. domestic business entity that has a tangible net worth of at least three hundred million dollars (\$300,000,000) and at least three (3) years of experience operating a generating plant of similar technology and similar size to the Facility.

“**RE**” means the interconnection or reliability regional entity designated by NERC as responsible for enforcing electric reliability standards for the geographic area in which the Facility is located.

“**REC**” means (a) the Environmental Attributes associated with all Net Output, together with (b) the Environmental Attribute Reporting Rights associated with such energy and Environmental Attributes, however commercially transferred or traded under any of these or other product names, such as “Renewable Energy Credits,” “Renewable Energy Certificates,” “Green-e Certified”, GIS Certificates or otherwise. One (1) REC represents the Environmental Attributes made available by the generation of one (1) MWh of Net Output from the Facility.

“**REC Price Component**” means [REDACTED]; provided that Buyer may in its discretion replace such amount with such designated market price reports for RECs, effective as of the time specified by Buyer.

“**Reporting Month**” means each calendar month during the Term.

“**Required Facility Documents**” means all material Permits, authorizations, rights and agreements now or hereafter necessary for construction, ownership, operation, and maintenance of the Facility, the lawful operation of the Facility, and to deliver Net Output to Buyer in accordance with this Agreement and Requirements of Law, including those set forth in **Exhibit 3.2.6** and **Exhibit F**. Nothing set forth in **Exhibit 3.2.6** limits the obligations of Seller to obtain all Required Facility Documents, the Permits set forth in **Exhibit F** or as otherwise required hereunder. Required Facility Documents does not include any Financing Documents (other than collateral pledged under any Financing Document).

“**Requirements of Law**” means any applicable federal, state and local law, statute, regulation, rule, action, order, code or ordinance enacted, adopted, issued or promulgated by any federal, state, local or other Governmental Authority or regulatory body (including those pertaining to electrical, building, zoning, environmental and occupational safety and health requirements).

“**RTLMP**” is Real-Time LMP as that term is used in the Tariff.

“**SCADA**” means a remote supervisory control and data acquisition system to be provided by Seller, which includes all necessary components and contact points at the Facility.

**“Scheduled Commercial Operation Date”** means [REDACTED].

**“Seller”** is defined in the Recitals.

**“Seller Indemnitees”** is defined in Section 12.1.2.

**“Seller Uncontrollable Minutes”** means, for the Facility in any Contract Year, the total number of minutes during such Contract Year during which the Facility was unable to deliver Net Output to Buyer because Buyer failed to accept such delivery or due to one or more of the following events, each as recorded by Seller’s SCADA and indicated by Seller’s electronic fault log: (a) a Force Majeure event; (b) a curtailment in accordance with Section 4.4; (c) the System or Buyer’s System operating outside the voltage or frequency limits defined in the applicable operating manual for the Inverters installed at the Facility; or (d) a default by Buyer; provided, however, that if any of the events described above in items (a) through (d) occur simultaneously, then the relevant period of time shall only be counted once in order to prevent double counting. Seller Uncontrollable Minutes shall not include minutes when (i) the Facility or any portion thereof was unavailable solely due to Seller’s non-conformance with the Generation Interconnection Agreement or (ii) the Facility or any portion thereof was paused or withdrawn from use by Seller for reasons other than those covered in this definition.

**“Seller’s Cost to Cover”** means the positive difference, if any, between (a) the Contract Price per MWh specified in **Exhibit 5.1**, and (b) the net proceeds per MWh actually realized by Seller from the sale to a third party of Net Output and RECs not purchased by Buyer as required hereunder. If on any given day the difference between (a) and (b) referenced above is zero or negative, then Seller’s Cost to Cover shall be zero dollars (\$0) with respect to such day, and Buyer shall have no obligation to pay any amount to Seller on account of Section 11.2.2. For any days prior to the Commercial Operation Date, the Contract Price applicable in the first Contract Year shall be utilized for purposes of clause (a).

**“Senior Lenders”** means the Lenders providing construction financing for the Facility, or any term or permanent take-out financing of the costs of development and construction, as described in the definition of “Lenders”, other than Affiliates of Seller.

**“Solar Array”** means one or more Solar Panels connected to the same Inverter.

**“Solar Panels”** means the photovoltaic energy generating panels installed at the Facility as described in **Exhibit 6.1**.

**“Solar Performance Modeling Program”** means a commercially available computer modeling program that is generally accepted in the solar energy industry capable of modeling the Expected Energy and other similar outputs. Solar Performance Modeling Program includes, but is not limited to, the PVSYST program. Seller, at its cost, shall provide Buyer access to any Solar Performance Modeling Program selected by Seller in order for Buyer to fully analyze all modeling provided by Seller under this Agreement.

**“Standard & Poor’s”** means S&P Global Ratings, a division of S&P Global Inc.



**“Station Use”** means Facility Output used to operate the Facility or provide electric energy for any other activities occurring on the Premises or prior to the low side of the substation of the Interconnection Facilities.

**“System”** means the transmission facilities over which MISO has operational control.

**“System Operator”** means any entity, including Transmission Provider, that becomes responsible as system operator for, or directs the operation of, the System.

**“Tariff”** means the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff as amended and filed with FERC from time to time.

**“Tax Credits”** means any state, local or federal production tax credit, tax deduction, or investment tax credit specific to the production of renewable energy or investments in renewable energy facilities.

**“Tax Equity Financing”** means a transaction or series of transactions involving one or more Tax Investors seeking a return that is enhanced by tax credits and/or tax depreciation including without limitation (i) described in Revenue Procedures 2001-28 (sale-leaseback (with or without “leverage”)), 2007-65 (flip partnership) or 2014-12 (flip partnership and master tenant partnership) as those revenue procedures are reasonably applied or analogized to a solar project transaction (as opposed to a wind farm or rehabilitated real estate) or (ii) contemplated by Section 50(d)(5) of the Code, as amended (a pass-through lease), provided that in any case, such transaction or series of transactions does not result in the direct or indirect transfer, disposition or sale of any of the managing or controlling membership interests in Seller.

**“Tax Investor”** is defined in the Lender Consent.

**“Term”** is defined in Section 2.1.

**“Termination Payment”** means, with respect to the non-defaulting Party, as applicable, either (i) the sum of Losses plus Costs or (ii) the difference between Costs minus Gains, expressed in U.S. dollars. If the Termination Payment calculation does not demonstrate that the non-defaulting Party suffered a net loss, the Termination Payment shall be \$0. If the Termination Payment calculation does demonstrate that the non-defaulting Party suffered a net loss, a Termination Payment shall be due to the non-defaulting Party pursuant to Section 11.5.

**“Test Energy”** means any Net Output during the period between the Effective Date and the Commercial Operation Date, and all associated Ancillary Services, RECs and Capacity Rights.

**“Transmission Provider”** means MISO or any successor entity.

**“Transmission Service”** means transmission services pursuant to which the Transmission Provider transmits Output to the Point of Delivery, as applicable.

## 1.2 Rules of Interpretation.

1.2.1. General. Terms used in this Agreement but not specifically defined in this Section 1 shall have meanings as commonly used in the English language; provided that words not otherwise defined herein that have well known and generally accepted technical or trade meanings are used in accordance with such recognized meanings. Unless otherwise required by the context in which any term appears, (a) the singular includes the plural and vice versa; (b) references to “Articles,” “Sections,” “Schedules,” “Annexes,” “Appendices” or “Exhibits” are to articles, sections, schedules, annexes, appendices or exhibits hereof; (c) all references to a particular entity or an electricity market price index include a reference to such entity’s or index’s successors; (d) “herein,” “hereof” and “hereunder” refer to this Agreement as a whole; (e) all accounting terms not specifically defined herein shall be construed in accordance with generally accepted accounting principles consistently applied; (f) the masculine includes the feminine and neuter and vice versa; (g) “including” means “including, without limitation” or “including, but not limited to”; (h) all references to a particular tariff, law or statute mean that tariff, law or statute as amended from time to time; and (i) the word “or” is not necessarily exclusive.

1.2.2. Terms Not to be Construed For or Against Either Party. Each term hereof shall be construed simply according to its fair meaning and not strictly for or against either Party. The Parties have jointly prepared this Agreement, and no term hereof shall be construed against a Party on the ground that the Party is the author of that provision.

1.2.3. Headings. The headings used for the sections and articles hereof are for convenience and reference purposes only and shall in no way affect the meaning or interpretation of the provisions hereof.

1.2.4. Examples. Example calculations and other examples set forth herein are for purposes of illustration only and are not intended to constitute a representation, warranty or covenant concerning the example itself or the matters assumed for purposes of such example. If there is a conflict between an example and the text hereof, the text shall control.

1.2.5. Consents and Agreements. Except as otherwise provided in this Agreement, whenever a consent, approval or other similar action is required of a Party in this Agreement, such Party shall not unreasonably condition, withhold or delay in granting or providing any such consent, approval or similar action.

### 1.2.6. Generation Interconnection Agreement.

(a) The Parties acknowledge and agree that the Generation Interconnection Agreement shall be a separate and free standing contract.

(b) Except as otherwise provided in this Agreement, nothing in the Generation Interconnection Agreement, nor any other agreement between Seller on the one hand and Transmission Provider on the other hand, nor any alleged event of default thereunder, shall alter or modify the Parties’ rights, duties, and obligations hereunder. This Agreement shall not be construed to create any rights between Seller and the Transmission Provider.

## SECTION 2 TERM; FACILITY DEVELOPMENT

2.1 Term. Subject to this Section 2.1, this Agreement shall become effective upon the Effective Date; provided, however, that the Parties shall be entitled to terminate this Agreement as described in this Section 2.1, and provided further, that notwithstanding any provision of this Agreement to the contrary, Buyer shall have no obligation to purchase any power under this Agreement until the later of (i) the date the Kentucky Public Service Commission approves this Agreement, and (ii) the date the Rural Utilities Service approves this Agreement. No later than thirty (30) days after the date of this Agreement, Buyer may apply for approval of this Agreement from the Kentucky Public Service Commission and/or the Rural Utilities Service. Each Party shall have the right to terminate this Agreement, without any further financial or other obligation by or to any Party as a result of such termination, by written notice to the other Party at any time between the 180<sup>th</sup> day and the 365<sup>th</sup> day following Buyer's application for such approvals, if prior to the date of such termination either or both of the Kentucky Public Service Commission and/or the Rural Utilities Service has not issued its respective approval. If either or both of the Kentucky Public Service Commission and/or the Rural Utilities Service has not issued its respective approval on or before the 365<sup>th</sup> day following Buyer's application for such approvals, this Agreement shall terminate without any further financial or other obligation by or to any Party as a result of such termination. The term of this Agreement shall commence on the Effective Date and, unless earlier terminated as provided herein, shall remain in effect until the twentieth (20th) anniversary of the Commercial Operation Date ("**Term**").

2.2 Milestones. Time is of the essence in the performance hereof, and Seller's completion of the Facility and delivery of Net Output, Capacity Rights and RECs by the Scheduled Commercial Operation Date is critically important. Therefore, Seller shall use its commercially reasonable efforts to achieve the milestones set forth in **Exhibit 2.2** on or before the corresponding respective times indicated; provided however, that Seller shall have no liability under this Agreement, and it shall not be an Event of Default hereunder, in the event Seller does not achieve any such milestone (other than the milestone for Commercial Operation) by the corresponding date.

### 2.3 Facility Construction and Delay Damages.

(a) If Commercial Operation is not achieved on or before the Scheduled Commercial Operation Date, Seller shall pay to Buyer Delay Damages for each day from and after the Scheduled Commercial Operation Date through the date that the Facility achieves Commercial Operation.

(b) If Commercial Operation is not achieved by the Guaranteed Commercial Operation Date, Buyer may terminate this Agreement pursuant to Section 11.

(c) Seller shall not sell any output of any Solar Array that causes the Nameplate Capacity Rating of the Facility to be in excess of the Expected Nameplate Capacity Rating, or any RECs, Ancillary Services or Capacity Rights associated with such output, to any person or entity other than Buyer, and Buyer may in its sole discretion, but is not required to, purchase any output of such Solar Array, or any RECs, Ancillary Services or Capacity Rights

associated with such output. If Buyer elects to purchase any such output, the Maximum Delivery Rate shall be increased to the extent of the output Buyer has elected to purchase.

2.4 Damages Calculation. Each Party agrees and acknowledges that (a) the damages that Buyer would incur due to Seller's delay in achieving Commercial Operation would be difficult or impossible to predict with certainty, and (b) it is impractical and difficult to assess actual damages in the circumstances stated, and therefore the Delay Damages as agreed to by the Parties and set forth herein are a fair and reasonable calculation of such damages. Notwithstanding the foregoing, this Section 2.4 shall not limit the amount of damages payable to Buyer if this Agreement is terminated as a result of Seller's failure to achieve Commercial Operation by the Guaranteed Commercial Operation Date. Any such termination damages shall be determined in accordance with Section 11.5.

2.5 Damages Invoicing. By the fifteenth (15th) day following the end of the calendar month in which the Delay Damages begin to accrue, and continuing on the fifteenth (15th) day of each calendar month during the period in which Delay Damages accrue (and the following months if applicable), Buyer shall deliver to Seller an invoice showing Buyer's computation of such damages and any amount due Buyer in respect thereof for the preceding calendar month. No later than ten (10) Business Days after receiving such an invoice and subject to Sections 10.3 and 10.4, Seller shall pay to Buyer, by wire transfer of immediately available funds to an account specified in writing by Buyer or by any other means agreed to by the Parties in writing from time to time, the amount set forth as due in such invoice.

2.6 Buyer's Right to Monitor. During the Term, Seller shall permit Buyer and its advisors and consultants to, upon Buyer's reasonable advance notice to Seller and during normal business hours:

(a) Review and discuss with Seller and its advisors and consultants monthly status reports on the progress of the acquisition, design, financing, engineering, construction and installation of the Facility. Between the Effective Date and thirty (30) days following the Commercial Operation Date, Seller shall, on or before the tenth (10th) Business Day of each calendar month, provide Buyer with a monthly status report for the preceding month.

(b) Monitor the status of the acquisition, land leasing, design, financing, engineering, construction and installation of the Facility and the performance of the contractors constructing the Facility.

(c) Monitor and receive monthly updates from Seller concerning (i) the progress of Seller's negotiation and execution of contracts for the acquisition, design, financing, engineering, construction and installation of the Facility, Premises, major equipment and warranties, and (ii) the contractors' performance and achievement of contract deliverables and all performance and other tests required to achieve Commercial Operation or contemplated by the warranty agreements between Seller and a manufacturer of the Facility's Solar Panels and Inverters and any other material items of Facility equipment that require testing for warranty agreements to be effective.

(d) Witness initial performance tests and other tests and review the results thereof. Seller shall provide Buyer with at least five Business Days prior notice of each such test, with the understanding that if the performance of such test is dependent on the presence of sufficient solar exposure or other variables beyond the control of Seller, the date of such test may be postponed if, on the date specified in the related notice, there is insufficient solar exposure or other circumstances beyond the control of Seller that prevent the performance of such test on the scheduled date.

(e) Perform such examinations, inspections, and quality surveillance as, in Buyer's reasonable judgment, are appropriate and advisable to determine that the Facility has been properly commissioned and Commercial Operation has been achieved.

(f) Except as otherwise provided in this Agreement, Seller does not herein grant Buyer the right to review, comment on or approve of the terms or conditions of any contract or negotiation between Seller and a third party, the terms and conditions of each such contract or negotiation being confidential and to be determined by Seller in its sole discretion. Conversely, nothing in this Agreement shall be construed to require Buyer to review, comment on, or approve of any contract between Seller and a third party.

(g) With respect to Buyer's right to monitor under this Section 2.6, (i) Buyer is under no obligation to exercise any of these monitoring rights, (ii) such monitoring shall occur subject to reasonable rules developed by Seller regarding Facility construction, access, health, safety, and environmental requirements, and (iii) Buyer shall have no liability to Seller for failing to advise it of any condition, damages, circumstances, infraction, fact, act, omission or disclosure discovered or not discovered by Buyer with respect to the Facility or any contractor. Any review or monitoring of the Facility conducted by Buyer hereunder shall be performed in a manner that does not impede, hinder, postpone, or delay Seller or its contractors in their performance of the engineering, construction, design or testing of the Facility. Buyer shall maintain one or more designated representatives for purposes of the monitoring activities contemplated in this Section 2.6, which representatives shall have authority to act for Buyer in all technical matters under this Section 2.6 as authorized by Buyer, but not to amend or modify any provision hereof. Buyer's initial representatives and their contact information are listed in **Exhibit 2.6**. Buyer may, by written notice to Seller, change its representatives or their contact information.

2.7 Tax Credits. Seller shall bear all risks, financial and otherwise throughout the Term, associated with Seller's or the Facility's eligibility to receive PTCs, ITCs, or other Tax Credits, or to or qualify for accelerated depreciation for Seller's accounting, reporting or tax purposes, on account of rules respecting the Facility owner minimum interest in the Facility's risks, the relationship between Facility owner and Seller or otherwise. The obligations of the Parties hereunder, including those obligations set forth herein regarding the purchase and price for and Seller's obligation to deliver Buyer's Interest, shall be effective regardless of whether the sale of Output or Net Output from the Facility is eligible for, or receives, PTCs, ITCs or other Tax Credits during the Term.

2.8 Commercial Operation. Seller shall provide written notice to Buyer stating when Seller believes that the Facility has achieved Commercial Operation and its Nameplate Capacity Rating accompanied by the certificates described in the definition of Commercial Operation.

Buyer shall have five (5) Business Days after receipt either to confirm to Seller that all of the conditions to Commercial Operation have been satisfied or have occurred, or to state with specificity what Buyer reasonably believes has not been satisfied. If, within such five Business Day period, Buyer does not respond or notifies Seller confirming that the Facility has achieved Commercial Operation, the original date of receipt of Seller's written notice shall be the Commercial Operation Date. If Buyer notifies Seller within such five Business Day period that Buyer reasonably believes the Facility has not achieved Commercial Operation, Seller must address the concerns stated in Buyer's notice to the mutual satisfaction of both Parties, and Commercial Operation shall occur on the date of such satisfaction, as specified in a notice from Buyer to Seller.

### **SECTION 3 REPRESENTATIONS AND WARRANTIES**

3.1 Mutual Representations and Warranties. Each Party represents, covenants, and warrants to the other that:

3.1.1. Organization. It is duly organized and validly existing under the laws of its State of organization.

3.1.2. Authority. It has the requisite power and authority to enter hereinto and to perform according to the terms hereof.

3.1.3. Corporate Actions. It has taken all corporate actions required to be taken by it to authorize the execution, delivery and performance hereof and the consummation of the transactions contemplated hereby.

3.1.4. No Contravention. The execution, delivery, performance and observance by it of its obligations hereunder do not (a) contravene any provision of, or constitute a default under, (i) any indenture, mortgage, security instrument or undertaking, or other material agreement to which it is a party or by which it is bound, (ii) any valid order of any court, or any regulatory agency or other body having authority to which it is subject, or (iii) any material Requirements of Law presently in effect having applicability to it, or (b) require the consent or approval of, or material filing or registration with, any Governmental Authority or other person except as provided herein.

3.1.5. Valid and Enforceable Agreement. This Agreement is a valid and legally binding obligation of it, enforceable against it in accordance with its terms, except as the enforceability hereof may be limited by general principles of equity or bankruptcy, insolvency, bank moratorium or similar laws affecting creditors' rights generally and laws restricting the availability of equitable remedies.

3.1.6. Eligible Contract Participant. It, and any guarantor of its obligations hereunder, is an "eligible contract participant" within the meaning of the Commodity Exchange Act.

3.2 Seller's Further Representations and Warranties. Seller further represents, covenants, and warrants to Buyer that:

3.2.1. Organization. Seller is a limited liability company duly organized and validly existing under the laws of Delaware.

3.2.2. Authority. Seller (i) has or will have prior to Commercial Operation all required regulatory authority to make wholesale sales from the Facility; (ii) has the power and authority to own and operate its businesses and properties, to own or lease and be present upon the property it occupies and to conduct the business in which it currently engaged; and (iii) is duly qualified and in good standing under the laws of each jurisdiction where its ownership, lease or operation of property or the conduct of its business requires such qualification.

3.2.3. No Contravention. The execution, delivery, performance and observance by Seller of its obligations hereunder do not and will not:

(a) contravene, conflict with or violate any provision of any material Requirements of Law presently in effect having applicability to either Seller or any Affiliate of Seller;

(b) require the consent or approval of or material filing or registration with any Governmental Authority or other person other than such material consents and approvals which are set forth in **Exhibit 3.2.6** and expected to be obtained in due course;

(c) result in a breach of or constitute a default under any provision of any security issued by Seller or any Affiliate of Seller or any material agreement, instrument or undertaking to which either Seller or any Affiliate of Seller is a party or by which the property of Seller or any Affiliate of Seller is bound.

3.2.4. Litigation. No litigation, arbitration, investigation or other proceeding is pending or, to the best of Seller's knowledge, threatened against Seller or any Affiliate with respect hereto and the transactions contemplated hereunder. To Seller's knowledge, no other investigation or proceeding is pending or threatened against Seller.

3.2.5. Accuracy of Information. To Seller's knowledge, no exhibit, contract, report or document furnished by Seller to Buyer in connection with this Agreement, or the negotiation or execution hereof contains any material misstatement of fact or omits to state a material fact or any fact necessary to make the statements contained therein not misleading.

3.2.6. Required Facility Documents. All Required Facility Documents are listed in **Exhibit 3.2.6**. Pursuant to the Required Facility Documents, Seller holds as of the Effective Date, or will hold by the Commercial Operation Date, all rights and entitlements necessary to construct, own and operate the Facility and to deliver Buyer's Interest to Buyer in accordance with this Agreement. Seller shall notify Buyer of any material consent or approval that (a) Seller determines is required for the construction, ownership or operation of the Facility, and (b) is not already listed in **Exhibit 3.2.6**.

3.2.7. Delivery of Energy. On or before the Commercial Operation Date, Seller shall hold rights sufficient to enable Seller to deliver Net Output at the Expected Nameplate Capacity Rating from the Facility, on a firm basis, to the Point of Delivery pursuant to this Agreement throughout the Term.

3.2.8. Control of Premises. Seller has or will have all legal rights necessary for the Seller to enter upon and occupy the Premises for the purpose of constructing, operating and maintaining the Facility for the Term and Seller is not in material breach of any terms or conditions of such leases or other rights in real property for the Facility or Premise. All leases of real property required for the expected operation of the Facility or the performance of any obligations of Seller hereunder at the Premises are set forth and accurately described in **Exhibit 3.2.6**. Seller shall maintain all leases or other land grants necessary for the construction, operation and maintenance of the Facility as valid for the Term. Upon request by Buyer, Seller shall provide copies of the recorded memoranda of lease.

3.2.9. Certification as an Eligible Renewable Resource. The Facility will, not later than the Commercial Operation Date, be certified, and will at all times thereafter remain certified (subject to the applicable respective time limitations of participation in such programs), as an eligible renewable resource under the renewable portfolio or renewable energy standards of the Green-e Energy certification programs, and any successor programs, through tracking registries including GATS and M-RETS and any successor tracking registries. Provided that (i) the Facility remains eligible under the Ohio SREC program (or any successor program) and (ii) such program's requirements have not changed or the cost or expense of certification have not increased in any material respect following the Effective Date, then Seller shall have the Facility certified by the Commercial Operation Date as an eligible renewable resource under the renewable portfolio or renewable energy standards of the Ohio SREC certification program, and any successor programs. Following the Commercial Operation Date and throughout the remainder of the Term, Seller shall use commercially reasonable efforts to have the Facility remain certified as an eligible renewable resource under the renewable portfolio or renewable energy standards of the Ohio SREC certification program, and any successor programs, provided, however, that in the event such program's requirements change or the cost or expense of certification increase in any material respect following the Effective Date, then Seller shall not be in breach of this Agreement for the Facility's failure to be so certified under the Ohio SREC program or any successor program. Except as described in Section 4.5, Seller, at its cost, is responsible for obtaining and maintaining the Facility certifications and registrations required under this Section 3.2.9.

3.2.10. Green Guides. Seller has at all times been and will at all times be fully compliant with the requirements of the Federal Trade Commission's "Green Guides," 77 F.R. 62122, 16 C.F.R. Part 260, or any successor rule, in any communication concerning Net Output, the Facility or the RECs.

3.3 No Other Representations or Warranties. Each Party acknowledges that it has entered hereinto in reliance upon only the representations and warranties set forth in this Agreement, and that no other representations or warranties have been made by the other Party with respect to the subject matter hereof.

3.4 Continuing Nature of Representations and Warranties; Notice. The representations and warranties set forth in this Section 3 are made as of the Effective Date and deemed made continually throughout the Term. If at any time during the Term, any Party obtains actual knowledge of any event or information which causes any of the representations and warranties in this Section 3 to be materially untrue or misleading, such Party shall provide the other Party with written notice of the event or information, the representations and warranties affected, and the



action, if any, which such Party intends to take to make the representations and warranties true and correct. The notice required pursuant to this Section 3 shall be given as soon as practicable after the occurrence of each such event.

#### **SECTION 4 DELIVERIES OF NET OUTPUT, ANCILLARY SERVICES, CAPACITY RIGHTS AND RECS**

4.1 Purchase and Sale. Except as otherwise expressly provided herein, commencing on the Commercial Operation Date and continuing through the Term, Seller shall sell and make available to Buyer, and Buyer shall purchase and receive, (a) the Net Output from the Facility at the Point of Delivery, and (b) all Ancillary Services, Capacity Rights and RECs associated with Net Output or otherwise resulting from the generation and delivery of energy by the Facility (which shall come from the Facility and from no other source); provided, however, that Buyer may at its sole option, but shall be under no obligation to, receive any Net Output above the Maximum Delivery Rate, or any Capacity Rights, Ancillary Services, or RECs associated with any Net Output above the Maximum Delivery Rate. In no event shall Buyer be obligated to purchase, receive or pay for Output (or RECs or Ancillary Services associated with Output) that is not delivered to the Point of Delivery. In addition, during the period between the Effective Date and the Commercial Operation Date, Seller shall sell and make available to Buyer, and Buyer shall purchase and receive, Net Output, Ancillary Services, Capacity Rights, and associated RECs from the Facility at the Point of Delivery as Test Energy at the price specified in Section 5.1.1.

4.2 No Sales to Third Parties. During the Term, Seller shall not sell any Net Output, RECs, Ancillary Services or Capacity Rights from the Facility to any party other than Buyer; *provided, however*, that this restriction shall not apply with respect to Net Output or RECs during periods when Buyer is in default hereof because it has, without excuse, failed to accept or purchase such Net Output or RECs if required to hereunder.

4.3 Title and Risk of Loss of Net Output. Seller shall deliver Net Output, Ancillary Services, Capacity Rights and associated RECs free and clear of all liens, claims and encumbrances. Title to and risk of loss of Net Output shall transfer from Seller to Buyer upon its delivery to Buyer at the Point of Delivery. Seller shall be deemed to be in exclusive control of, and responsible for, any damage or injury caused by all Output up to and at the Point of Delivery. Buyer shall be deemed to be in exclusive control of, and responsible for, any damages or injury caused by, Net Output from the Point of Delivery. Delivery of Net Output to Buyer on any particular day shall be subject to the provisions of this Agreement.

4.4 Curtailement. The rights and obligations of the Parties with respect to curtailments of Net Output are as follows:

4.4.1. Curtailement During Negative RTLMP Period. During a Negative RTLMP Period, Seller shall either: (i) curtail deliveries of Net Output during any Calculation Period occurring within the Negative RTLMP Period; or (ii) continue to deliver Net Output to the Point of Delivery. If Seller continues to deliver Net Output to Buyer during a Negative RTLMP Period, then notwithstanding Section 5.1, Seller shall indemnify and hold Buyer harmless from all costs and expenses of such RTLMP, and the purchase price Buyer shall pay for all such Net Output

shall be an amount equal to ( [REDACTED]

[REDACTED] No later than the tenth (10th) Business Day of the month following any month in which Seller delivered Net Output during a Negative RTLMP Period, Seller shall deliver to Buyer an invoice showing the amounts calculated pursuant to this section, and a description, in reasonable detail, of the calculation of the amounts. Buyer shall offset an amount equal to any undisputed amounts set forth in the invoice received from Seller, against the amounts owed by Buyer to Seller in the next billable month, provided that if the amount of such credit is greater than the amount payable by Buyer for such month, the excess portion of such credit shall be applied by Buyer to reduce the amount payable by Buyer hereunder in subsequent month(s).

4.4.2. Economic Curtailment. Buyer shall offer the Buyer's Interest of the Net Output into the Transmission Provider's energy market as the Market Participant. If, for any hour, the Transmission Provider causes or requires the Facility to curtail its delivery of Output to the Point of Delivery in such hour due to Buyer's sales price offer curve or Buyer's minimum price offer for such Renewable Energy (unless the sales price offer curve or minimum price were dictated by the Transmission Provider (provided that customary price clearing or setting shall not be deemed to be dictated by the Transmission Provider)), or due to Buyer's failure to offer, then the amount of such curtailment shall be compensable curtailment energy pursuant to this Section 4.4.2. In the event of such curtailment, the Parties shall determine the quantity of Potential Energy that would have been produced by the Facility and available for delivery had its generation not been so curtailed. Buyer shall pay to Seller for such Curtailment Energy an amount equal to all amounts that Seller would have received from Buyer under this Agreement had such Curtailment Energy actually been delivered to the Point of Delivery. For purposes of determining Curtailment Energy, the amount of Potential Energy at any given time shall be calculated using the best-available data and methods to determine an accurate representation of the amount of Output Seller could have delivered to the Point of Delivery given the then current available capability of the Facility during a curtailment. Nothing in this Section 4.4.2 would require Buyer to submit a Day Ahead offer for any hour at a price less than zero.

4.5 Transfer of Title to RECs; Renewable Portfolio Standard Certifications.

4.5.1. Title to the RECs shall pass from Seller to Buyer immediately upon the generation of the Output at the Facility that gives rise to such RECs. The Parties shall execute all additional documents and instruments reasonably requested by Buyer in order to further document the transfer of the RECs to Buyer or its designees. Without limiting the generality of the foregoing, Seller shall, on or before the tenth (10th) day of each month, deliver to Buyer a REC Attestation and Bill of Sale in the form attached as **Exhibit 4.5** for all RECs delivered to Buyer hereunder in the preceding month, along with any attestation that is then-current with the Center for Resource Solution's Green-e program and the Ohio SREC, and any successor programs. Seller, at its own cost and expense, shall register with, pay all fees required by, and comply with, all reporting and other requirements of GIS relating to the Facility or RECs. Seller shall ensure that the Facility will participate in and comply with, during the Term, all aspects of GIS, except as described in Section 4.5.2 below. Seller, at its sole expense, shall use GIS as required pursuant to the GIS Operating Procedures to effectuate the transfer of GIS Certificates to Buyer, and shall transfer such GIS Certificates to Buyer in accordance with GIS reporting protocols and GIS Operating Procedures. Buyer shall be entitled to a refund of the REC Price Component for RECs associated

with any Net Output for which Certificates are not delivered, and Buyer shall transfer the affected corresponding RECs back to Seller.

4.5.2. Seller shall promptly provide Buyer copies of all documentation it submits to GIS. Further, in any program involving Environmental Attributes administered by CAMD or other Governmental Authority, upon notification by CAMD or other Governmental Authority that any transfers contemplated by this Agreement will not be recorded, Seller shall promptly take all reasonable actions necessary so that such transfers can be recorded. Seller shall not claim in any public communication nor report under any applicable program that any of the RECs purchased by Buyer hereunder belong to any person other than Buyer. Without limiting the generality of Buyer's ownership of the RECs, Buyer may report under such program that such Environmental Attributes purchased hereunder belong to it. Each Party shall promptly give the other Party copies of all documents it submits to the CAMD or other Governmental Authority to effectuate any transfers. Seller shall cause the Facility (i) to maintain its registration in good standing with the Center for Resource Solution's Green-e program and as an eligible renewable resource in the renewable portfolio standard or equivalent programs of the federal government and the states set forth in Section 3.2.9 throughout the Term and (ii) to qualify and register and maintain such qualification/registration with any equivalent programs created by any future legislation. Seller shall also cooperate in any registration of the Facility in the renewable portfolio standard or other equivalent program in all such further states and programs in which Buyer may request Seller to register or maintain registered the Facility, to the extent that such registrations and other requirements do not impose a material economic or administrative burden on Seller.

#### 4.6 Capacity Rights.

4.6.1. Purchase and Sale of Capacity Rights. For and in consideration of Buyer's agreement to purchase from Seller the Net Output and RECs on the terms and conditions set forth herein, Seller transfers to Buyer, and Buyer accepts from Seller, any right, title, and interest that Seller may have in and to Capacity Rights existing during the Term. Buyer's purchase of Capacity Rights in no way represents any purchase of equity or ownership rights of any kind in Seller or the Facility.

4.6.2. Representation Regarding Ownership of Capacity Rights. Seller represents that it has not sold, and covenants that during the Term it will not sell or attempt to sell to any person or entity, the Capacity Rights, if any. During the Term, Seller shall not report to any person or entity that the Capacity Rights, if any, belong to anyone other than Buyer. Buyer may at its own risk and expense report to any person or entity that the Capacity Rights exclusively belong to it.

4.6.3. Further Assurances. At Buyer's request, the Parties shall execute such documents and instruments as may be reasonably required to effect recognition and transfer of the Capacity Rights, if any, to Buyer.

4.6.4. Capacity Accreditation. Buyer has or may in the future have certain planning, operating and reporting requirements with MISO or other Electric System Authority. Without assuming responsibility therefor, Seller shall maintain capacity accreditation with MISO or other Electric System Authority as required pursuant to the Generation Interconnection

Agreement and shall otherwise reasonably cooperate with Buyer (at Buyer's expense for third party costs) to obtain such capacity accreditation in accordance with the rules of any other Electric System Authority. All required testing shall be conducted in accordance with the applicable MISO or Electric System Authority rules.

4.6.5. Capacity Charges. MISO Planning Resource Auction benefits associated with the Capacity Rights shall exclusively and solely accrue to and be owned by Buyer, and Buyer shall be responsible for all costs, charges, fees or penalties associated with Buyer's scheduling and bidding in connection with the Capacity Rights imposed by MISO. Seller shall be responsible for all reasonable costs associated with transferring the Capacity Rights to Buyer. Seller shall reasonably cooperate with Buyer to obtain Buyer's benefits, including Buyer's scheduling and bidding of the Facility into each annual MISO Planning Resource Auction or incremental auctions for the Term. The Parties shall execute such documents and instruments as may be reasonably required to effect recognition and transfer of the Capacity Rights, if any, to Buyer. Buyer shall have the exclusive right to commit the Facility to the MISO Planning Resource Auction market or successor auctions, in a manner consistent with MISO Rules.

4.7 Ancillary Services. As System Operator allows or may allow in the future intermittent resources to bid into Ancillary Services markets operated by the System Operator, Seller shall install such meters and power electronics, and conduct all Facility testing in accordance with the applicable MISO and Electric System Authority rules so that Ancillary Services may be provided; provided that notwithstanding anything herein to the contrary, Seller shall not be obligated to make any additional capital expenditures or install additional equipment or modify the Facility as it is contemplated as of the Effective Date.

## SECTION 5 CONTRACT PRICE; COSTS

5.1 Contract Price; Includes Net Output, RECs, Ancillary Services and Capacity Rights. Buyer shall pay Seller the prices provided for in this Section 5.1 for all deliveries of Buyer's Interest received by Buyer. The Contract Price provided for in Section 5.1.2 and the price for Test Energy provided for in Section 5.1.1 include the consideration to be paid by Buyer to Seller for all Net Output, RECs, Ancillary Services and Capacity Rights, and Seller shall not be entitled to any compensation over and above the Contract Price or the Test Energy price, as the case may be, for the RECs, Ancillary Services or Capacity Rights associated therewith.

5.1.1. Test Energy. Between the Effective Date and the Commercial Operation Date, Seller shall sell and deliver to the Point of Delivery all Test Energy. Buyer shall pay Seller (a) for all Test Energy delivered at the Point of Delivery up to the Maximum Delivery Rate an amount per MWh equal to [REDACTED] provided, however, that Seller's right to receive payment for such Test Energy is subject to Buyer's right of offset under Section 10.2 for, among other things, payment by Seller of any Delay Damages owed to Buyer by Seller pursuant to Section 2.3. Seller will make reasonable efforts to provide Buyer with a day-ahead hourly schedule of Test Energy generated. To the extent Seller delivers and Buyer accepts Test Energy in excess of the Maximum Delivery Rate, the Contract Price per MWh shall be \$0.

5.1.2. Commercial Operation. For the period beginning on the Commercial Operation Date and thereafter during the Term, Seller shall sell and deliver to the Point of Delivery all Net Output. Buyer shall pay to Seller the Contract Price per MWh, as specified in **Exhibit 5.1**, for Net Output delivered to the Point of Delivery up to the Maximum Delivery Rate. To the extent Seller delivers and Buyer accepts Net Output in excess of the Maximum Delivery Rate, the Contract Price per MWh shall be \$0.

5.2 Costs and Charges; Network Upgrades.

5.2.1. Except as described herein, Seller shall be responsible for paying or satisfying when due all costs or charges imposed in connection with the scheduling and delivery of Net Output up to and at the Point of Delivery, including transmission costs, Transmission Service, transmission line losses and any operation and maintenance charges imposed pursuant to the Generation Interconnection Agreement. Buyer shall be responsible for all costs or charges, if any, imposed in connection with the delivery of Net Output at and from the Point of Delivery, including transmission costs and transmission line losses and imbalance charges or penalties.

5.2.2. This PPA may be terminated by Buyer prior to Commercial Operation of the Facility, upon written notice to Seller of such termination, if the Network Upgrade Costs required to interconnect the Facility to the System, as described and reflected in any of the DPP Phase II, in the Final System Impact Study, or in the final form of Generation Interconnection Agreement (or, in each case, in documentation provided in connection therewith with respect to costs for upgrades to any Affected System (as defined in the Generation Interconnection Agreement)) when received by Seller or its Affiliate, exceed an amount equal to the greater of (i) \$10,000,000 in the aggregate or (ii) if applicable, \$10,000,000 in the aggregate plus the excess amount of Network Upgrade Costs Seller or Buyer agreed to bear in any prior notice delivered by Seller to Buyer, or Buyer to Seller, pursuant to this Section 5.2. Any notice of termination by Buyer under this Section 5.2.2 shall be given, if at all, on or before the date five (5) Business Days after Buyer's receipt from Seller of the **DPP Phase II, Final Facilities Study, or Generation Interconnection Agreement** (as applicable).

(a) Seller shall promptly, and in no event more than three (3) Business Days following Seller's receipt thereof, provide Buyer with written notice of the receipt of each of, and a copy of each of, the DPP Phase II, the Final System Impact Study, and the final form of Generation Interconnection Agreement.

(b) If Buyer timely gives a termination notice under Section 5.2.2 above, or in the event Buyer fails to provide a termination notice within the five (5) Business Day period described in Section 5.2.2 above (which failure shall be deemed to be equivalent to a notice of termination from Buyer), Seller shall have the right, but not the obligation:

(i) to notify Buyer in writing on or before the date that is five (5) Business Days following Seller's receipt of Buyer's termination notice that Seller agrees to bear and pay for that excess portion of the Network Upgrade Costs which triggered Buyer's termination right under this Section 5.2, and if Seller gives such notice, the applicable termination notice from Buyer shall be deemed withdrawn, Buyer's right to

effect such applicable termination shall be deemed irrevocably waived, and this PPA shall not terminate in respect of such termination notice.

(ii) In the event Seller does not provide such notice, then (A) this PPA shall terminate effective as of the expiration of such five (5) Business Day period and neither Party shall have any further liability or obligation hereunder (except for liabilities and obligations that, by their terms, survive any such termination), (B) Buyer shall return the Credit Support to Seller no later than five (5) Business Days following such termination, and (C) Seller shall return to Buyer any amounts previously paid by Buyer associated with Network Upgrade Costs pursuant to this PPA.

(c) In the event Buyer does not provide a termination notice pursuant to Section 5.2.2 above and instead provides Seller with written notice during such five (5) Business Day period set forth in Section 5.2.2 above that Buyer shall be responsible for and shall pay such potential excess Network Upgrade Costs that gave rise to such termination right, then the termination rights set forth in this Section 5.2 shall be of no further force or effect and this PPA shall continue in full force and effect thereafter.

(d) Notwithstanding anything to the contrary herein, the Parties agree that, with respect to final Network Upgrade Costs up to and including \$10,000,000, each of Buyer and Seller shall be responsible for fifty percent (50%) of such final Network Upgrade Costs for the Facility (i.e. each Party would be responsible for 50% of such final Network Upgrade Costs, up to a maximum of \$5,000,000).

(e) Provided this PPA has not been earlier terminated, Seller shall pay for the Network Upgrade Costs pursuant to the terms and conditions of the Generation Interconnection Agreement and Buyer agrees to reimburse Seller for its applicable portion and amount of Network Upgrade Costs Buyer has agreed to bear and pay for pursuant to this Section 5.2 no later than ten (10) Business Days following receipt of notice and reasonable evidence from Seller of Seller's payment thereof and receipt by Buyer of Seller's invoice for the applicable costs. The Parties acknowledge and agree that (i) Seller will be responsible for providing security required under Attachment X of the Tariff to proceed with the Facility's interconnection process thereunder, (ii) that such security may be used by the Transmission Provider to pay for such final Network Upgrade Costs, and (iii) the use by Transmission Provider of such security to pay for such final Network Upgrade Costs shall not affect Buyer's obligation to reimburse Seller for its applicable portion and amount of Network Upgrade Costs Buyer has agreed to bear and pay for pursuant to this Section 5.2.

### 5.3 Station Service.

5.3.1. The Parties recognize that this Agreement does not provide for the supply of any electric service by Buyer to Seller or to the Facility and Seller must enter into separate arrangements for the supply of electric services to the Facility. Seller acknowledges that it shall have no claims against Buyer under this Agreement with respect to the provision of station service.

5.3.2. The Parties acknowledge and agree that the arrangements for the supply of electric services to the Facility shall be separate and free-standing arrangements and that the terms of this Agreement are not binding upon the supplier of such electric services.

5.3.3. Notwithstanding any other provision in this Agreement, nothing in the arrangements for the supply of retail electric services to the Facility shall alter or modify Seller's or Buyer's rights duties and obligations under this Agreement. This Agreement shall not be construed to create any rights between Seller and the supplier of such retail electric services.

5.3.4. Seller expressly recognizes that, for purposes of this Agreement, the supplier of retail electric services to the Facility shall be deemed to be a separate entity and separate contracting party whether or not the arrangements for the supply of retail electric services to the Facility is entered into with Buyer or an Affiliate of Buyer.

5.4 Taxes. Seller shall pay or cause to be paid when due, or reimburse Buyer for, all existing and any new sales, use, excise, ad valorem, and any other similar taxes, imposed or levied by any Governmental Authority up to and including the Point of Delivery, on the generation of Net Output, Capacity Rights, Ancillary Services or RECs or on the sale of Net Output, Capacity Rights, or RECs from Seller to Buyer hereunder, regardless of whether such taxes are imposed on Buyer or Seller under Requirements of Law. Buyer shall pay or cause to be paid when due, or reimburse Seller for, all such taxes levied at or beyond the Point of Delivery upon a purchaser (other than Buyer) of Net Output, Capacity Rights, Ancillary Services or RECs, regardless of whether such taxes are imposed on Buyer or Seller under Requirements of Law. If taxes are imposed or levied by a Governmental Authority on a Party in error or incorrectly, or on the wrong Party, the Parties shall work in good faith to cause such Governmental Authority to correct such error and levy or impose such taxes correctly. The Contract Price shall not be adjusted on the basis of any action of any Governmental Authority with respect to changes to or revocations of sales and use tax benefits, rebates, exception or give back.

5.5 Costs of Ownership and Operation. Without limiting the generality of any other provision hereof, and except as expressly described in Section 5.2, Seller shall be solely responsible for paying when due (a) all costs of owning and operating the Facility in compliance with existing and future Requirements of Law and the terms and conditions hereof, and (b) except as described in Section 5.4 above, all taxes and charges (however characterized) now existing or hereinafter imposed on or with respect to the Facility, its operation, or on or with respect to emissions or other environmental impacts of the Facility, including any such tax or charge (however characterized) to the extent payable by a generator of such energy or environmental impacts.

5.6 Rates Not Subject to Review. The rates for service specified herein shall remain in effect until expiration of the Term, and shall not be subject to change for any reason, including regulatory review, absent agreement of the Parties. Neither Party shall petition FERC pursuant to the provisions of sections 205 or 206 of the Federal Power Act (16 U.S.C. § 792 *et seq.*) to amend such prices or terms, or support a petition by any other person seeking to amend such prices or terms, absent the agreement in writing of the other Party. Further, absent the agreement in writing by both Parties, the standard of review for changes hereto proposed by a Party, a non-party or the FERC acting *sua sponte* shall be the "public interest" application of the "just and reasonable"

standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Serv. Corp.*, 350 U.S. 332 (1956) and *Fed. Power Comm'n v. Sierra Pac. Power Co.*, 350 U.S. 348 (1956) and clarified by *Morgan Stanley Capital Group, Inc. v. Pub. Util. Dist. No. 1 of Snohomish*, 554 U.S. 527, 128 S. Ct. 2733 (2008) and *NRG Power Mktg., LLC v. Maine Pub. Util. Comm'n*, 130 S. Ct. 503 (2010).

5.7 MISO Membership. Nothing in this Agreement shall be interpreted to require Buyer to remain a transmission owning member of MISO. If Buyer ceases to be a transmission owning member of MISO, or if Buyer otherwise desires for the Facility to be a generation resource in a regional transmission organization other than MISO, the Parties will use good-faith efforts to amend this Agreement to preserve, to the extent reasonably practicable, the economic benefits of the Agreement for both Parties

## SECTION 6 OPERATION AND CONTROL

6.1 As-Built Supplement. Upon completion of construction of the Facility, Seller shall provide Buyer the As-Built Supplement. The As-Built Supplement shall be deemed effective and shall be added to **Exhibit 6.1** when it has been reviewed and approved by Buyer, acting reasonably. If the proposed As-Built Supplement does not, in any material respect, accurately describe the Facility as actually built or is otherwise defective as to form in any material respect, Buyer may, within fifteen (15) days after receiving the proposed As-Built Supplement, give Seller a notice describing what Buyer reasonably believes is inaccurate. If Buyer does not give Seller such a notice within the fifteen (15) day period, the As-Built Supplement shall be deemed approved. If Buyer provides a timely notice regarding inaccuracies, Seller shall in good faith cooperate with Buyer to revise the As-Built Supplement to address Buyer's concerns. Notwithstanding the foregoing, Buyer shall have no right to require Seller to relocate, modify or otherwise change in any respect any aspect of the Facility as actually built. Nothing in this Section 6.1, nor Buyer's approval of the As-Built Supplement, shall require Buyer to purchase, or pay more than \$0 per MWh for, any Net Output, or for Ancillary Services, Capacity Rights, or RECs associated with any Net Output, above the Maximum Delivery Rate.

### 6.2 Standard of Facility Operation.

6.2.1. General. Seller will act as the Generator Operator of the facility within MISO. At Seller's sole cost and expense (except as described in Section 5.2), Seller shall build, operate, maintain and repair the Facility and the Interconnection Facilities in accordance with (i) the applicable and mandatory standards, criteria and formal guidelines of FERC, any System Operator, and any other Electric System Authority and any successors to the functions thereof; (ii) the Permits and Required Facility Documents; (iii) the Generation Interconnection Agreement; (iv) all Requirements of Law; (v) the requirements hereof; and (vi) Prudent Electrical Practice. Seller acknowledges that it shall have no claims hereunder against Buyer with respect to any requirements imposed by or damages caused by (or allegedly caused by) the Interconnection Provider, the Transmission Provider, any provider of transmission services to the Point of Delivery, or any third party transmission system. Station service shall be the responsibility of Seller. Seller acknowledges that it shall have no claims against Buyer under this Agreement with respect to the provision of station service.



6.2.2. Qualified Operator. From and after the Commercial Operation Date, Seller shall itself operate the Facility or cause the Facility to be operated by an entity that has at least two years of experience in operation of solar energy facilities of comparable size to the Facility and approved by Buyer.

6.2.3. Fines and Penalties.

(a) Seller shall pay when due and assessed all fines, penalties, or legal costs incurred by Seller or for which Seller is legally responsible for noncompliance by Seller, its agents, employees, contractors or subcontractors, with respect to any provision hereof, any agreement, commitment, obligation or liability incurred in connection with this Agreement or the Facility or any Requirements of Law, except where such fines, penalties or legal costs are being contested in good faith by Seller, its agents or contractors through appropriate proceedings and Seller has (i) set aside and funded adequate reserves to cover such fines, penalties or legal costs in the event of an adverse determination, or (ii) posted security to Buyer or Seller's Senior Lenders adequate to ensure Seller's ability to cover such fines, penalties or legal costs in the event of an adverse determination.

(b) If fines, penalties, or legal costs are assessed against or incurred by Buyer on account of any action by any Governmental Authority due to noncompliance by Seller with any Requirements of Law or the provisions hereof, or if the performance of Seller is delayed or stopped by order of any Governmental Authority due to Seller's noncompliance with any Requirements of Law, Seller shall indemnify and hold harmless Buyer against any and all losses, liabilities, damages, and claims suffered or incurred by Buyer as a result. Without limiting the generality of the foregoing, Seller shall reimburse Buyer for all fees, damages, or penalties, including Buyer's reasonable legal costs and attorney's fees, imposed on Buyer by any Governmental Authority or other person or to other utilities for violations of any Requirements of Law or to the extent caused by a default by Seller or a failure of performance by Seller hereunder.

6.3 Interconnection. Except as set forth in Section 5.2.2, Seller shall be responsible for the costs and expenses associated with interconnection of the Facility at its Nameplate Capacity Rating at the Point of Delivery including the costs of any third party transmission system upgrades, or System or Buyer System upgrades beyond the Point of Delivery necessary to interconnect the Facility with the System and to allow the delivery of all Net Output and Ancillary Services to the Point of Delivery. Except as set forth in Section 5.2.2, Seller shall have no claims against Buyer under this Agreement with respect to any requirements imposed by or damages caused by (or allegedly caused by) acts or omissions of the Transmission Provider or Interconnection Provider, in connection with the Generation Interconnection Agreement or otherwise. Seller shall be solely responsible for, and shall defend, indemnify and hold Buyer harmless against, any Liabilities arising out of Seller's performance or failure to perform under the Generation Interconnection Agreement. Seller's failure to obtain, or perform under, or breach of, the Generation Interconnection Agreement, or its other contracts and obligations to, Transmission Provider or Interconnection Provider is not, by itself, an event of Force Majeure.

6.4 Coordination with System Operator. Seller shall be responsible for the coordination and synchronization of the Facility and the Interconnection Facilities with the System and Buyer's System. In the event there are unanticipated changes in FERC or Electric System

Authority rules sufficiently significant to change the benefits, risks and burdens held by the Parties, the Parties shall meet in good faith to adjust the terms of this Agreement to provide for the Parties the originally intended allocation of benefits, risks and burdens.

#### 6.5 Outages.

Seller shall be responsible to enter all outages (Planned, Maintenance and Forced) into the MISO Control Room Operations Window Outage Scheduler (CROW).

6.5.1. Planned Outages. Except as otherwise provided herein, Seller shall not schedule a Planned Outage during day light hours (sunrise to sunset) of any portion of the months of November, December, January, February, June, July, and August, except to the extent a Planned Outage is reasonably required to enable a vendor to satisfy a guarantee requirement in a situation in which the vendor is not otherwise able to perform the guarantee work at a time other than during one of the months specified above or is otherwise consistent with Prudent Electrical Practices. Commencing with the second Contract Year, Seller shall provide Buyer with an annual forecast of Planned Outages for each Contract Year at least one (1) month, but no more than three (3) months, before the first day of that Contract Year, and shall promptly update such schedule, and otherwise change it only, to the extent that Seller is reasonably required to change it in order to comply with Prudent Electrical Practices. Seller shall not schedule any maintenance of Interconnection Facilities during such months without the prior written approval of Buyer.

6.5.2. Maintenance Outages. If Seller reasonably determines that it is necessary to schedule a Maintenance Outage, Seller shall notify Buyer of the proposed Maintenance Outage as soon as practicable but in any event at least five (5) days before the outage begins (or such shorter period in light of then-existing solar exposure conditions or if required pursuant to Prudent Electrical Practices). Upon such notice, the Parties shall plan the Maintenance Outage to mutually accommodate the reasonable requirements of Seller and the service obligations of Buyer; *provided, however*, that Seller shall take all reasonable measures and use commercially reasonable efforts consistent with Prudent Electrical Practices to not schedule any Maintenance Outage during any portion of the months of November, December, January, February, June, July, and August. Notice of a proposed Maintenance Outage shall include the expected start date and time of the outage, the anticipated amount of generation capacity of the Facility that will not be available, and the expected completion date and time of the outage. Seller shall give Buyer notice of the Maintenance Outage as soon as practicable after Seller determines that the Maintenance Outage is necessary. Buyer shall promptly respond to such notice and may request reasonable modifications in the schedule for the outage. Seller shall use all reasonable efforts to comply with any request to modify the schedule for a Maintenance Outage provided that such change has no impact on Seller or the Facility. Seller shall notify Buyer of any subsequent changes in generation capacity available to Buyer as a result of such Maintenance Outage or any changes in the Maintenance Outage completion date and time. As soon as practicable, any notifications given orally shall be confirmed in writing. Seller shall take all reasonable measures and exercise its reasonable efforts consistent with Prudent Electrical Practices to minimize the frequency and duration of Maintenance Outages.

6.5.3. Forced Outages. If Buyer is not notified automatically via the electronic communications systems described in Section 6.9, Seller shall promptly provide to Buyer a written

report of any Forced Outage of the Facility. This report shall include the amount of the generation capacity of the Facility that will not be available because of the Forced Outage and the expected return date of such generation capacity. Seller shall promptly update the report as necessary to advise Buyer of changed circumstances. As soon as practicable, if the Forced Outage resulted in more than fifteen percent (15%) of the Nameplate Capacity Rating of the Facility being unavailable, the oral report shall be confirmed in writing by notice to Buyer. Seller shall take all reasonable measures and exercise its best efforts consistent with Prudent Electrical Practices to avoid Forced Outages and to minimize their duration.

6.5.4. Notice of Deratings and Outages. Without limiting the foregoing, Seller will inform Buyer, automatically via the electronic communications systems described in Section 6.9, via telephone to a number specified by Buyer or via email to an email specified by Buyer, of any major limitations, restrictions, deratings or outages known to Seller affecting the Facility for the following day and will promptly update Seller's notice to the extent of any material changes in this information, with "major" defined as affecting more than ten percent (10%) of the Nameplate Capacity Rating of the Facility.

6.5.5. Effect of Outages on Estimated Output. Seller represents and warrants that the estimated monthly Net Output set forth on **Exhibit A** takes into account the Planned Outages, Maintenance Outages, and Forced Outages that Seller reasonably expects to encounter in the ordinary course of operating the Facility, and that such outages are not expected to substantially reduce the Facility's average estimated monthly output as set forth in **Exhibit A**.

## 6.6 Scheduling.

6.6.1. Market Participant. Buyer shall act as the Market Participant and act as the Asset owner for the Facility and for the daily generation offers of the Facility into MISO markets, and shall have all applicable rights and obligations under the Tariff to offer the energy output of the Facility into the centralized markets operated by MISO, including, without limitation, the right to determine the offer price in its sole discretion.

6.6.2. Buyer shall make available to Seller, as requested, the hourly day-ahead award volumes of the Facility within three hours of those awards being posted by MISO the day prior to the operating day. Buyer shall receive all revenue associated with those sales into the day-ahead market.

6.6.3. Seller shall notify Buyer of the metered net generation from the Facility at the end of the following day. Buyer shall receive all real-time revenue associated with variances between the day-ahead award and net metered generation.

6.6.4. Actual metered net generation for any hour will serve as the basis for the calculation of the amount payable by Buyer to Seller for that hour.

6.6.5. Seller shall be responsible for payment of all uninstructed actual deviation or other deployment failure charges imposed under the MISO Tariff solely resulting from Seller's failure to operate the Facility in accordance with the scheduling of the Facility as directed by MISO; provided, that, for purposes of clarity, Seller shall not be responsible for (and Buyer shall be responsible for) any such charges that are related to or due to differences in expected

production as compared to actual production resulting from (i) lesser or greater solar irradiance, (ii) a Force Majeure event, and/or (iii) Planned Outages, Forced Outages and/or Maintenance Outages, except in the event of Seller's breach of this Agreement related to such Planned Outages, Forced Outages and/or Maintenance Outages.

6.6.6. Seller shall comply with all Electric System Authority and FERC market behavior rules and standards of conduct.

6.6.7. Transmission Services. Buyer shall be responsible for arranging and paying for all transmission services required to effectuate the taking of Net Output away from the Point of Delivery. Buyer may appoint any agent for purposes of scheduling delivery of Net Output and transmission away from the Point of Delivery.

6.6.8. Cooperation and Standards. With respect to any and all scheduling and outage requirements hereunder, (a) Seller shall cooperate with Buyer with respect to scheduling Net Output, and (b) each Party shall designate authorized representatives to communicate with regard to scheduling and related matters arising hereunder. Each Party shall comply with the applicable variable resource standards and criteria of any applicable Electric System Authority.

6.6.9. Breach of Generation Interconnection Agreement. If, for any reason, Buyer is deemed by a System Operator to be financially responsible for Seller's performance under the Generation Interconnection Agreement, then (a) Seller shall take all necessary steps such that Buyer is no longer responsible for Seller's performance under the Generation Interconnection Agreement, and (b) Seller shall defend, indemnify and hold Buyer harmless against any liability of Seller's under the Generation Interconnection Agreement or System Operator requirement.

## 6.7 Forecasting.

6.7.1. Long-Range Forecasts. For Buyer's planning purposes, Seller shall, by December 1 of each year during the Term (except for the last year of the Term), provide an annual update to the expected long-term monthly/diurnal mean net energy estimates (12 X 24 profile). Seller shall update the forecast for each month by notice to Buyer at least six Business Days before the first Business Day of such month.

6.7.2. Real-time Forecasts. Every hour, Seller shall deliver electronically to Buyer a rolling set of twelve 5-minute interval energy forecasts for the Facility in accordance with the MISO Rules. The submission of such forecasts shall be provided by a mutually agreeable method and in accordance with Prudent Electrical Practices. Seller may update such forecasts in accordance with MISO Rules. Seller shall provide real time meteorological data to MISO in accordance with MISO Rules.

6.7.3. Day-Ahead Forecasts and Updates. By such time as mutually agreed to by the Parties on the Business Day immediately preceding the day on which Net Output from the Facility is to be delivered, Seller shall provide Buyer with an hourly forecast of deliveries for each hour of the next one hundred sixty-eight (168) hours. Seller shall update a forecast any time information becomes available indicating a change in the forecast of generation of Net Output from the then-current forecast; provided however that Seller shall also provide to Buyer any forecasting updates it provides to the Transmission Provider as soon as they are provided to the

Transmission Provider. The Parties shall cooperate to implement and use automatic forecast updates. Seller shall communicate forecasts under this Section 6.7.3 in an efficient manner, including electronic mail or other such media as determined by Buyer (which, at Buyer's discretion, may be in lieu of or in addition to notice to Buyer). Buyer may, with the advance written consent of Seller and at Seller's expense, add forecasting services for Seller's Facility to Buyer's existing contract with a qualified solar-energy-production forecasting vendor, which contract and vendor may change during the term of this Agreement. Seller shall simultaneously provide to Buyer copies of any solar forecasts that Seller provides to the Transmission Provider or System Operator. Buyer may, at Seller's expense (provided that such expense shall not exceed \$15,000 annually), add forecasting services, including any real-time forecasting services and provision of real-time meteorological data required for compliance with applicable Electric System Authority procedures, protocol, rules and testing, for the Facility to a Buyer contract with a qualified solar-energy-production forecasting vendor, which contract and vendor may change during the term of this Agreement. The Parties agree that the forecasting obligations of Seller under this Section 6.7 may be met by a solar forecast service provider engaged by Buyer. Upon request by Buyer, Seller shall provide a 24 hour telephone number that Buyer may contact to determine the then-current status of the Facility. Buyer may at Buyer's cost and without the prior consent of Seller add the Facility to Buyer's qualified solar-energy-production forecasting vendor contract.

6.7.4. Basis of Forecasts. The forecasts called for by this Agreement shall be non-binding, good faith estimates only (and, as a result, are subject to risks, uncertainties and other factors that may cause the actual results to differ from such forecasts), but must meet the standards of the Transmission Provider, and shall be substantially in the form of **Exhibit 6.7.3** attached hereto (as such form may be updated by Buyer from time to time upon notice to Seller). Seller shall prepare such forecasts and updates by utilizing a solar exposure model or service that is (a) commercially available or proprietary to Seller or an Affiliate of Seller, and (b) comparable in accuracy to models or services commonly used in the solar energy industry, so long as such model or service is available at a commercially reasonable cost and is satisfactory to Buyer in the exercise of its reasonable discretion. On or prior to May 1 during each calendar year in the Term, Seller shall determine in good faith which such model or service to utilize after consultation with Buyer. In the event such model or service is not available at a commercially reasonable cost, Seller shall internally develop a forecasting process and present such process to Buyer for acceptance, which shall not be unreasonably withheld.

6.8 Limitations on Increase in Nameplate Capacity Rating and Other Facilities. Seller shall not increase the ability of the Facility to deliver Net Output in quantities in excess of the Maximum Delivery Rate without Buyer's consent, which consent Buyer may withhold for any reason in its sole discretion. Seller shall not construct any generating facilities on the Premises except for the Facility.

6.9 Electronic Communications.

6.9.1. Meteorological Data. Seller will provide to Buyer copies of all meteorological data as and to the extent required to be submitted to the System Operator, promptly after such data is submitted to the System Operator.

6.9.2. Telemetry. Seller shall provide telemetry equipment and facilities capable of transmitting the following information concerning the Facility pursuant to the Generation Interconnection Agreement and to Buyer on a real-time basis, and will operate such equipment when requested by Buyer to indicate:

- (a) instantaneous MW output at the Point of Delivery;
- (b) Net Output; and
- (c) the Facility's total instantaneous generation capacity.

Seller shall also transmit to Buyer the data described in **Exhibit 6.9.2** from the Facility that Seller receives on a real time basis, provided that such data is not already accessible to Buyer without cost in its normal course of operations. Seller shall provide such real time data to Buyer on the same basis on which Seller receives the data (*e.g.*, if Seller receives the data in four second intervals, Buyer shall also receive the data in four second intervals). Buyer shall have the right from time to time to require Seller to provide additional telemetry equipment and facilities to the extent necessary and reasonable, all at Buyer's sole cost and expense.

6.9.3. Transmission Provider Consent. Seller shall execute a consent, in the form required by Transmission Provider, to provide that Buyer can read the meter and receive any and all data from the Transmission Provider relating to transmission of Net Output or other matters relating to the Facility without the need for further consent from Seller.

6.9.4. Dedicated Communication Circuit. If Seller does not use ICCP communication as described in Section 6.9.6, Seller shall install a dedicated direct communication circuit (which may be by common carrier telephone) between Buyer and the control center in the Facility's control room or such other communication equipment as the Parties may agree.

6.9.5. SCADA. Seller shall be responsible for purchasing, installing, repairing, and maintaining any and all communications equipment at the Seller-designated location on the Site as may be necessary to support dispatch and SCADA real-time data electronic transfer. Seller shall use commercially reasonable efforts to automatically control the real power output of the Facility to attempt to achieve the dispatch level communicated to Seller by MISO for each 5-minute interval security constrained economic dispatch (SCED) desired MW basepoint received through the MISO SCADA system.

6.9.6. ICCP Communication. If during the Term Seller establishes ICCP communication, Seller will use commercially reasonable efforts to provide Buyer, at Buyer's expense, real time electronic meter data via ICCP over the internet for the net MW flow from the Facility, updated every minute.

## 6.10 Reports and Records.

6.10.1. Monthly Reports. Within thirty (30) days after the end of each Reporting Month, Seller shall provide to Buyer a report in electronic format, which report shall include (a) summaries of the Facility's solar insolation and actual and predicted output data for the Reporting Month in intervals not to exceed one day, including information from the Facility's

computer monitoring system; (b) summaries of any other significant events related to the construction or operation of the Facility for the Reporting Month; (c) any supporting information that Buyer may from time to time reasonably request (including historical solar exposure data for the Facility); and (d) details regarding the availability of the Facility.

6.10.2. Electronic Fault Log. Seller shall maintain an electronic fault log of operations of the Facility during each hour of the Term commencing on the Commercial Operation Date. Seller shall provide Buyer with a copy of the electronic fault log within thirty (30) days after the end of the calendar month to which the fault log applies.

6.10.3. Other Information to be Provided to Buyer. Seller shall provide to Buyer the following information concerning the Facility:

(a) Upon the reasonable request of Buyer, the manufacturers' guidelines and recommendations for maintenance of the Facility equipment;

(b) A report summarizing the results of maintenance performed during each Maintenance Outage, Planned Outage, and any Forced Outage, and upon request of Buyer any of the technical data obtained in connection with such maintenance;

(c) Before Commercial Operation, a monthly progress report stating the percentage completion of the Facility and a brief summary of construction activity during the prior month;

(d) Before Commercial Operation, a monthly report containing a brief summary of construction activity contemplated for the next month;

(e) at any time from the Effective Date, one year's advance notice of the termination or expiration of any land leases pursuant to which the Facility or any equipment relating thereto is upon the Premises; provided that the foregoing does not authorize any early termination of any land lease. In the event Seller has less than one year's advance notice of such termination or expiration, Seller shall provide the notice contemplated by this Section to Buyer within fifteen (15) Business Days of Seller obtaining knowledge of the termination or expiration; and

(f) Such other information respecting the condition or operations of Seller or the Facility as Buyer may, from time to time, reasonably request.

6.10.4. Information to Governmental Authorities. Seller shall, promptly upon written request from Buyer, provide Buyer with all data collected by Seller related to the Facility reasonably required by Buyer or an Affiliate thereof for reports to, and information requests from, any Governmental Authority or Electric System Authority. Along with this information, Seller shall provide to Buyer copies of all submittals to Governmental Authorities or Electric System Authorities directed by Buyer and related to the operation of the Facility with a certificate that the contents of the submittals are true and accurate to the best of Seller's knowledge. Seller shall use reasonable efforts to provide this information to Buyer with sufficient advance notice to enable Buyer to review such information and meet any submission deadlines imposed by the requesting organization or entity.

6.10.5. Data Request. Seller shall, promptly upon written request from Buyer, provide Buyer with data reasonably required for information requests from any Governmental Authorities, state or federal agency intervener or any other party achieving intervenor status in any Buyer proceeding or other proceeding before any Governmental Authority. Seller shall use reasonable efforts to provide this information to Buyer sufficiently in advance to enable Buyer to review it and meet any submission deadlines.

6.10.6. Documents to Governmental Authorities. After sending or filing any material statement, application, and report or any document with any Governmental Authority or Electric System Authority relating to operation and maintenance of the Facility, Seller shall provide to Buyer a copy of the same.

6.10.7. Environmental Information. Seller shall, promptly upon written request from Buyer, provide Buyer with all data reasonably requested by Buyer relating to environmental information under the Required Facility Documents. Seller shall further provide Buyer with all material environmental impact mitigation measures it is taking in connection with the Facility's construction or operation, as well as copies of all agreements between Seller and federal, state or local environmental agencies. Seller shall disclose to Buyer, as soon as it is known to Seller, any material violation of any environmental laws or regulations arising out of the construction or operation of the Facility, and to the extent thereof, the presence of Environmental Contamination at the Facility or on the Premises, alleged to exist by any Governmental Authority having jurisdiction over the Premises, or the existence of any past or present enforcement, legal, or regulatory action or proceeding relating to any actual or alleged violation or presence of Environmental Contamination.

6.10.8. Operational Reports. Seller shall provide Buyer monthly operational reports in a form similar to the operational report form attached hereto as **Exhibit 6.10.8** and Seller shall, promptly upon written request from Buyer, provide Buyer with all operational data reasonably requested by Buyer with respect to the performance of the Facility and delivery of Buyer's Interest therefrom.

6.10.9. Notice of Material Adverse Events. Seller shall promptly notify Buyer of receipt of written notice or actual knowledge by Seller or its Affiliates of the occurrence of any event of default under any material agreement to which Seller is a party and of any other development, financial or otherwise, which would have a material adverse effect on Seller, the Facility or Seller's ability to develop, construct, operate, maintain or own the Facility as provided herein.

6.10.10. Notice of Litigation. Following its receipt of written notice or actual knowledge of the commencement of any action, suit, and proceeding before any court or Governmental Authority which would, if adversely determined, materially and adversely affect Seller, the Premises or the Facility, Seller shall promptly give notice to Buyer of the same. In addition, following its receipt of written notice or actual knowledge of the commencement of any action, suit, and proceeding against Seller before any court or Governmental Authority, Seller shall promptly give notice to Buyer of the same.



6.10.11. Additional Information. Seller shall provide to Buyer such other information respecting the condition or operations of Seller or the Facility as Buyer may, from time to time, reasonably request.

6.10.12. Job Tracking. Seller shall provide to Buyer data on how many jobs have been, or are being, created by the construction or operation of the Facility, the nature of such jobs, and the types of skill sets needed to fill such jobs; *provided, however*, that Seller shall not be obligated to provide such information to Buyer more than once per calendar year.

6.10.13. Confidential Treatment. The monthly reports and other information provided to Buyer under this Section 6.10 shall be treated as Confidential Business Information, subject to Buyer's rights to disclose such information pursuant to Sections 6.10.4, 6.10.5, 9.5, 23.3 and pursuant to any applicable Requirements of Law. Seller shall have the right to seek confidential treatment of any such information from the Governmental Authority entitled to receive such information.

6.11 Financial and Accounting Information. If Buyer or one of its Affiliates determines that, under FIN 46R, it may hold a variable interest in Seller, but it lacks the information necessary to make a definitive conclusion, Seller hereby agrees to provide sufficient financial and ownership information so that Buyer or its Affiliate may confirm whether a variable interest does exist under FIN 46R. If Buyer or its Affiliate determines that, under FIN 46R, it holds a variable interest in Seller, Seller hereby agrees to provide sufficient financial and other information to Buyer or its Affiliate so that Buyer may properly consolidate the entity in which it holds the variable interest or present the disclosures required by FIN 46R. Buyer shall reimburse Seller for Seller's reasonable costs and expenses, if any, incurred in connection with Buyer's requests for information under this Section 6.11.

6.12 Output Guaranty.

6.12.1. Output Guarantee. Beginning in the third Contract Year, Seller is obligated to deliver an average annual quantity of Net Output during each [REDACTED] Contract Year period which is equal to the Output Guarantee. For purposes of this Agreement, "Output Guarantee" for any [REDACTED] Contract Year period means (i) [REDACTED] of the average of the Expected Energy of the Facility for such [REDACTED] Contract Year period, less (ii) the average annual quantities of Output that were not delivered to the Point of Delivery (or accepted by Buyer) in such [REDACTED] Contract Year period during periods constituting Seller Uncontrollable Minutes (such quantity calculated on the basis of the Net Output capable of being delivered in an hour at an average rate equivalent to the annual estimated output from Exhibit A divided by 8760).

6.12.2. Liquidated Damages for Output Shortfall.

(a) If the annual average of the quantity of Net Output delivered by Seller to the Point of Delivery during any such two Contract Year period is equal to or greater than the Output Guarantee for such [REDACTED] Contract Year period, Seller's delivery obligation for Net Output for such [REDACTED] Contract Year period shall be deemed satisfied for such two Contract Year period.

(b) If the annual average of the quantity of Net Output delivered by Seller to the Point of Delivery during any [REDACTED] Contract Year period is less than the Output Guarantee for such [REDACTED] Contract Year period, Seller shall pay Buyer liquidated damages, if any, for the Output Shortfall. The “**Output Shortfall**” shall be expressed in MWh and calculated in accordance with the following formula:

$$\text{Output Shortfall} = [REDACTED]$$

*less*

Any quantities of Output that were not delivered to the Point of Delivery (or accepted by Buyer) in such [REDACTED] Contract Year period during periods constituting Seller Uncontrollable Minutes (such quantity calculated on the basis of the Net Output capable of being delivered in an hour at an average rate equivalent to the annual estimated output from **Exhibit A** divided by 8760),

*less*

The annual average Net Output for the [REDACTED] Contract Year period.

(c) If the product of the Output Shortfall calculation set forth in Section 6.12.2(b) is a positive number (**Exhibit 6.12**), Seller shall pay Buyer liquidated damages equal to [REDACTED]. If the product of the Output Shortfall calculation set forth in Section 6.12.2(b) is a negative number, Seller shall not be obligated to pay Buyer liquidated damages for such [REDACTED] Contract Year period.

(d) Each Party agrees and acknowledges that (i) the damages that Buyer would incur due to the Facility's failure to achieve the Output Guarantee would be difficult or impossible to predict with certainty and (ii) the liquidated damages contemplated by this provision are a fair and reasonable calculation of such damages.

6.12.3. Annual Invoicing. On January 31 of each Contract Year, Buyer shall deliver to Seller an invoice showing Buyer’s computation of Net Output and Output Shortfall, if any, for the prior Contract Year and any amount due Buyer for liquidated damages pursuant to Section 6.12.2. In preparing such invoice, Buyer shall utilize the meter data provided to Buyer for the Contract Year in question, but may also rely on historical averages and such other information as may be available to Buyer at the time of invoice preparation, if the meter data for such Contract Year is then incomplete or otherwise not available. To the extent required, Buyer shall true up any such invoice as promptly as practicable following its receipt of actual results for the relevant Contract Year. Seller shall pay to Buyer, by wire transfer of immediately available funds to an account specified in writing by Buyer or by any other means agreed to by the Parties in writing from time to time, the amount set forth as due in such invoice, and shall within thirty (30) days after receiving the invoice raise any objections regarding any disputed portion of the invoice. All disputes regarding such invoices shall be subject to Section 10.4. Objections not made by Seller within the thirty (30) day period shall be deemed waived.

6.13 Access Rights. Upon reasonable prior notice and subject to the prudent safety requirements of Seller, and Requirements of Law relating to workplace health and safety, Seller shall provide Buyer and its authorized agents, employees and inspectors with reasonable access to the Facility: (a) for the purpose of reading or testing metering equipment, (b) as necessary to witness any acceptance tests, (c) in connection with the operation and maintenance of the Interconnection Facilities, (d) to provide tours of the Facility to customers and other guests of Buyer (not more than 12 times per year), (e) for purposes of implementing Sections 2.6 or 10.6, and (f) for other reasonable purposes at the reasonable request of Buyer. Buyer shall release Seller against and from any and all Liabilities resulting from actions or omissions by the Buyer Indemnitees in connection with their access to the Premises, except to the extent that such damages are caused or exacerbated by the intentional or negligent act or omission of any Seller Indemnitee.

6.14 Facility Images. Buyer shall be free to use any and all images from or of the Facility for promotional purposes. Upon Buyer's request and at Buyer's expense, Seller shall install imaging equipment at the Facility as Buyer may reasonably request, including video and or web-based imaging equipment subject to the prudent safety requirements of Seller, and Requirements of Law relating to workplace health and safety. Seller may only use images of the Facility for promotional purposes if such use conspicuously (a) complies with all best practices of the Center for Resource Solutions and requirements of its green-e energy program, (b) complies with Sections 3.2.9 and 4.5 hereof, and (c) states that Buyer is the purchaser of all Net Output and RECs.

## SECTION 7 QUALIFYING FACILITY OR EXEMPT WHOLESALE GENERATOR STATUS

7.1 Seller's Election. Seller covenants that, during the Term and before delivering Net Output and associated RECs to Buyer hereunder, Seller shall, to the extent required to prevent Seller from being subject to, or not exempt from, regulation as an "electric utility" or "holding company" pursuant to PUHCA or otherwise (except to the extent that QFs and EWGs are subject to regulation pursuant to PUHCA), either (a) cause the Facility to be a QF, or (b) cause Seller to be an EWG.

7.2 QF Facility. If the Facility is a QF, Seller shall provide Buyer with copies of the appropriate certification (which may include a FERC self-certification) within ten (10) days of filing or receiving the certification. At any time during the Term, for cause, Buyer may require Seller to provide Buyer with a written legal opinion from an attorney in good standing with recognized expertise in FERC matters and who has no economic relationship, association or nexus with Seller or the Facility (other than an attorney-client relationship), stating that the Facility is a QF and providing sufficient proof (including copies of all documents and data that Buyer may request) demonstrating that Seller has maintained and will continue to maintain the Facility as a QF. During the Term, Seller shall, to the extent required to prevent Seller from being subject to, or not exempt from, regulation as an "electric utility" or "holding company" pursuant to PUHCA or otherwise, maintain its QF status, and shall not seek to change the Contract Price as a result of its status as a QF.

7.3 EWG. If Seller is an EWG, Seller shall provide Buyer with copies of Seller's applications to FERC for EWG status and for authority to sell Net Output hereunder before

Commercial Operation and within ten (10) days after filing such applications. During the Term, Seller shall maintain its EWG status (to the extent it is required by law to do so) and its authority to sell power hereunder.

## SECTION 8 SECURITY AND CREDIT SUPPORT

8.1 Seller Credit Support. Seller shall provide Credit Support for its obligations under this Agreement as described in this Section 8 in the amount of (i) for the period commencing ninety (90) days following the Effective Date and ending on the Commercial Operation Date, the product of [REDACTED] per MW and the Expected Nameplate Capacity Rating and (ii) for the period commencing on the day immediately following the Commercial Operation Date and ending on the earlier of the expiration of the Term or the earlier termination of this Agreement in accordance with its terms, the product of [REDACTED] per MW and the Nameplate Capacity Rating.

8.2 Form of Credit Support. The Credit Support may be, at the option of Seller, in any of the following forms (or a combination thereof):

8.2.1. The Credit Support may be in the form of an irrevocable standby letter of credit in a form reasonably acceptable to Buyer, naming Buyer as the party entitled to demand payment and present draw requests thereunder that is issued by a U.S. commercial bank or a foreign bank with a U.S. branch having total assets of at least \$10 billion and a senior unsecured long term credit rating (unenhanced by third party support) equivalent to “A-” or better as determined by Standard & Poor’s or Fitch, and “A3” or better as determined by Moody’s.

8.2.2. The Credit Support may be in the form of U.S. currency deposited into an escrow account with a state- or federally-chartered commercial bank with net assets of at least \$1 billion. Such escrow account shall be governed by an escrow agreement in form mutually satisfactory to Seller, Buyer and the escrow agent, provided that (i) Buyer shall hold a first and exclusive perfected security interest in the funds in such escrow account, (ii) Buyer shall be permitted unilaterally to draw down any amount therein as described in this Section 8, regardless of any protest by Seller or any other party liable thereon (provided that nothing in the escrow agreement shall preclude any protest against Buyer by Seller, following any draw, that such draw did not comply with this Agreement), and (iii) Seller shall pay all fees and expenses of the escrow agent. All investment income on such escrow account shall be taxable to, and accrue for the benefit of, Seller. After the Commercial Operation Date, periodic sweeps by Seller for recovery of interest earned by the escrowed funds shall be allowed, and, at any time the balance in such escrow account exceeds the required amount of security, the escrow agent may remit any excess to Seller.

8.2.3. The Credit Support may consist of a guaranty in a form reasonably acceptable to Buyer, from a parent or other guarantor with an Investment Grade Credit Rating. If the Credit Rating of the such guarantor is (i) downgraded below Investment Grade, (ii) put on credit watch, or (iii) downgraded two levels in a 12 month period, then Buyer may require Seller to convert the guaranty to a Credit Support instrument meeting the criteria set forth in either subsection 8.2.1 or 8.2.2 above no later than ten (10) Business Days after notice from Buyer.

Seller may change the form of the Credit Support at any time and from time to time upon reasonable prior notice to Buyer, provided, however, that the Credit Support must at all times satisfy the requirements of this Section 8. Seller shall not be required to replenish the Credit Support following a draw thereon by Buyer.

8.3 Security is Not a Limit on Seller's Liability. The security contemplated by this Section 8: (a) constitutes security for, but is not a limitation of, Seller's obligations hereunder, and (b) shall not be Buyer's exclusive remedy for Seller's failure to perform in accordance with this Agreement; provided, however, that this Section 8.3 shall not limit or affect the Damage Caps described in Section 11.10.

8.4 Senior Lender Protective Provisions. Buyer agrees to enter into a consent to collateral assignment in substantially the form of the Lender Consent attached hereto as **Exhibit 8.4** for the benefit of the Senior Lenders, and to reasonably cooperate with the reasonable requests of such Senior Lenders in conjunction with any financing of the Facility; *provided, however,* that except as provided in the form of the Lender Consent, in no event shall Buyer be required to agree to any modification hereof; and provided further, however, that if and to the extent any Lenders request (a) changes to the form of the Lender Consent (or otherwise attempt to negotiate the form of consent), (b) any additional documents or assurances, or (c) any legal opinion from Buyer with regard hereto, then Seller shall reimburse Buyer for its reasonable out-of-pocket costs in making any such changes or providing any such additional documents or legal opinion, with such costs to be paid to Buyer at the closing of the financing as a condition to the effectiveness of Buyer's consents, documents and opinions. Seller will within five (5) Business Days of written demand reimburse Buyer all of Buyer's costs and expenses, including reasonable legal fees and costs of due diligence, incurred in connection with any action or exercise of rights or remedies by any of Senior Lenders against Seller, including any proceeding or foreclosure against Seller or this Agreement.

## SECTION 9 METERING

9.1 Installation of Metering Equipment. Metering equipment shall be designed, furnished, installed, owned, inspected, tested, maintained and replaced as provided in the Generation Interconnection Agreement; *provided, however,* that Buyer shall be under no obligation, pursuant hereto, to bear any expense relating to such metering equipment.

9.2 Metering. Metering shall be performed at the location and in the manner specified in **Exhibit 9.2**, the Generation Interconnection Agreement and as necessary to perform Section 4.5 and Seller's other obligations hereunder. All quantities of Net Output purchased hereunder shall reflect the net amount of energy flowing into Buyer's System at the Point of Delivery.

9.3 Inspection, Testing, Repair and Replacement of Meters.

9.3.1. Meter Errors. Buyer may periodically inspect test, repair and replace the metering equipment provided for in the Generation Interconnection Agreement without Buyer assuming any obligations thereunder. If any of the inspections or tests disclose an error exceeding one-half of one percent (0.5%), either fast or slow, proper correction, based upon the inaccuracy

found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the actual period cannot be ascertained, the proper correction shall be made to the measurements taken during the time the metering equipment was in service since last tested, but not exceeding three (3) months, in the amount the metering equipment shall have been shown to be in error by such test. Any correction in billings or payments resulting from a correction in the meter records shall be made in the next monthly billing or payment rendered. Such correction, when made, shall constitute full adjustment of any claim between Seller and Buyer arising out of such inaccuracy of metering equipment. Nothing in this Agreement shall give rise to Buyer having any obligations to Seller, or any other person or entity, pursuant to or under the Generation Interconnection Agreement.

9.3.2. Back-Up Meters. Seller shall own and maintain back-up metering equipment located at the Facility. Upon Buyer's reasonable request, Seller shall inspect and test the back-up meter(s). Buyer may have a representative present during any metering inspection or test.

9.4 Metering Costs. To the extent not otherwise provided in the Generation Interconnection Agreement, Seller shall bear all costs (including Buyer's costs) relating to all metering equipment installed to accommodate Seller's Facility.

9.5 Meter Data. Throughout the Term, Seller or a designated representative of Seller shall maintain, at Seller's sole cost and expense, its status at MISO as a Meter Data Management Agent. Upon written request by Buyer, Seller shall promptly request the Interconnection Provider or Transmission Provider in writing to provide any and all meter or other data associated with the Facility or Net Output directly to Buyer. Notwithstanding any other provision hereof, Buyer shall have the right to provide such data to any Electric System Authority.

9.6 GIS Metering. Buyer shall have the right upon notice to Seller to perform the Qualified Reporting Entity (as defined by the GIS) functions for the Facility to implement all necessary generation information communications in the GIS and report generation information to the GIS pursuant to a GIS-approved meter that is dedicated to the Facility and only the Facility.

## **SECTION 10 BILLINGS, COMPUTATIONS AND PAYMENTS**

10.1 Monthly Invoices. On or before the tenth (10th) Business Day following the end of each calendar month, Seller shall deliver to Buyer a proper invoice showing Seller's computation of Net Output delivered to Buyer during such month. When calculating the invoice, Seller shall provide computations showing the hourly Net Output that was delivered. Except as provided in Sections 10.2 and 10.4, if such invoice is delivered by Seller to Buyer, then Buyer shall send payment to Seller, on or before the later of the twentieth (20th) day following receipt of such invoice or the thirtieth (30th) day following the end of each month.

10.2 Offsets. Buyer may offset any payment due to Seller hereunder against amounts owing to Seller from Buyer pursuant hereto. Buyer's exercise of recoupment and set off rights shall not limit the other remedies available to Buyer hereunder, under such other agreements, or otherwise.

10.3 Interest on Late Payments. Any amounts that are not paid when due hereunder shall bear interest at the Contract Interest Rate from the date due until paid.

10.4 Disputed Amounts. If either Party, in good faith, disputes any amount due pursuant to an invoice rendered hereunder, such Party shall notify the other Party of the specific basis for the dispute and, if the invoice shows an amount due, shall pay that portion of the statement that is undisputed, on or before the due date. Except with respect to invoices provided under Section 6.12.2, any such notice shall be provided within two (2) years of the date of the invoice in which the error first occurred. If any amount disputed by such Party is determined to be due or required to be refunded to the other Party, or if the Parties resolve the payment dispute, the amount due or to be refunded shall be paid within five (5) Business Days after such determination or resolution, along with interest at the Contract Interest Rate from the date due until the date paid.

10.5 Records. Each Party shall keep and maintain all records as may be necessary or useful in performing or verifying the accuracy of all relevant data, estimates or statements of charges submitted hereunder until the later of (i) a period of at least twenty-four (24) months after the date an invoice was received by a Party, or (ii) if there is a dispute relating to an invoice, the date that is twenty-four (24) months after the date on which such dispute is resolved.

10.6 Audit Rights. Each Party, through its authorized representatives, shall have the right, at its sole expense upon reasonable notice and during normal business hours, to examine and copy the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made hereunder or to verify the other Party's performance of its obligations hereunder. Upon request, each Party shall provide to the other Party statements evidencing the quantities of Net Output delivered at the Point of Delivery. If any statement is found to be inaccurate, a corrected statement shall be issued and any amount due thereunder will be promptly paid and shall bear interest at the Contract Interest Rate from the date of the overpayment or underpayment to the date of receipt of the reconciling payment. Notwithstanding the foregoing, no adjustment shall be made with respect to any statement or payment hereunder unless a Party questions the accuracy of such payment or statement within two (2) years after the date of such statement or payment.

## SECTION 11 DEFAULTS AND REMEDIES

11.1 Defaults. The following events are defaults (each a "default" before the passing of applicable notice and cure periods, and an "**Event of Default**" thereafter) hereunder:

11.1.1. Defaults by Either Party.

(a) A Party fails to make a payment when due hereunder if the failure is not cured within ten (10) days after the non-defaulting Party gives the defaulting Party a notice of the default.

(b) A Party (i) makes an assignment for the benefit of its creditors; (ii) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy or similar law for the protection of creditors,

or has such a petition filed against it and such petition is not withdrawn or dismissed within sixty (60) days after such filing; (iii) becomes insolvent; or (iv) is unable to pay its debts when due.

(c) A Party breaches a representation or warranty made by it herein if the breach is not cured within thirty (30) days after the non-defaulting Party gives the defaulting Party a notice of the default.

(d) A Party otherwise fails to perform any material obligation hereunder for which an exclusive remedy is not provided hereunder and which is not addressed in any other Event of Default described in this Section 11.1, if the failure is not cured within thirty (30) days after the non-defaulting Party gives the defaulting Party notice of the default, unless a shorter period is provided for such failure hereunder; and provided that, upon written notice from the defaulting Party, this thirty (30) day period shall be extended by an additional sixty (60) days if (i) the failure cannot reasonably be cured within the thirty (30) day period despite diligent efforts, (ii) the default is capable of being cured within the additional sixty (60) day period, and (iii) the defaulting Party provides the non-defaulting Party a remediation plan, the non-defaulting party approves such remediation plan, and the defaulting Party promptly commences and diligently commences the cure and pursues the remediation plan within the original thirty (30) day period and is at all times thereafter diligently and continuously proceeding to cure the failure pursuant to the remediation plan.

11.1.2. Defaults by Seller.

(a) Seller fails to post, increase, maintain or replenish any security as required under this Agreement and such failure is not cured within five (5) Business Days following the date upon which such failure occurred in violation of this Agreement.

(b) Seller fails to cause the Facility to achieve Commercial Operation on or before the Guaranteed Commercial Operation Date.

(c) Seller's Abandonment of the Facility.

(d) Seller sells Output, RECs, Ancillary Services or Capacity Rights from the Facility to a party other than Buyer in breach hereof, or Seller makes a public statement or otherwise takes an action that any Governmental Authority or the Center for Resource Solutions determine is a retirement, double counting, double sale, double use or double claim of RECs, if Seller does not permanently cease such sale and compensate Buyer for the damages arising from the breach within ten (10) Business Days after Buyer gives Seller a notice of default.

(e) The Output Shortfall exceeds [REDACTED] of the Expected Energy in averaged over any [REDACTED] consecutive Contract Years.

(f) Seller defaults under any material agreement with any third party relating to the ownership, interconnection, operation, transmission from, maintenance or repair of the Facility, and fails to cure such default within the time required under such agreement, after the expiration of applicable notice, cure and waiver periods, resulting in the termination of such material agreement without a replacement or substitute thereof which would allow Seller to continue performance under and in compliance with this Agreement.



(g) Buyer receives notice of foreclosure of the Facility or any part thereof by a Lender, mechanic or materialman, or any other holder, of an unpaid lien or other charge or encumbrance, if the same has not been stayed, paid, or bonded around within ten days.

## 11.2 Remedies for Failure to Deliver/Receive Prior to Termination.

11.2.1. Remedy for Seller's Failure to Deliver. If Seller fails to deliver all or part of the Net Output and associated RECs required to be delivered under this Agreement, and such failure is not excused under the terms hereof or by Buyer's failure to perform, then Seller shall pay Buyer within five (5) Business Days after invoice receipt, an amount equal to (i) Buyer's Cost to Cover multiplied by the Net Output not delivered, (ii) additional transmission charges, if any, reasonably incurred by Buyer in moving replacement energy to the Point of Delivery or if not there, to such points in Buyer's control area as are determined by Buyer, and (iii) any additional cost or expense incurred as a result of Seller's failure to deliver, as determined by Buyer in a commercially reasonable manner (but not including any penalties, ratcheted demand or similar charges). The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

11.2.2. Remedy for Buyer's Failure to Purchase. If Buyer fails to receive or purchase all or part of the Net Output required to be purchased under this Agreement, and such failure is not excused under the terms hereof or by Seller's failure to perform, then Buyer shall pay Seller, on the earlier of the date payment would otherwise be due in respect of the month in which the failure occurred or within five (5) Business Days after invoice receipt, an amount equal to Seller's Cost to Cover multiplied by the amount of Net Output not purchased. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation thereof.

11.2.3. Remedy for Seller's Failure to Sell and Deliver Ancillary Services or Capacity Rights. Seller shall be liable for Buyer's actual damages in the event Seller fails to sell or deliver all or any portion of the Ancillary Services or Capacity Rights to Buyer, or if Seller sells or delivers all or any portion of the Ancillary Services or Capacity Rights to a person other than Buyer.

11.3 Termination and Remedies. Upon the occurrence of, and during the continuation of, an Event of Default, the non-defaulting Party shall be entitled to all remedies available under this Agreement and at law or in equity, and may terminate this Agreement by notice to the other Party designating the date of termination and delivered to the defaulting Party no less than one Business Day before such termination date; *provided, however*, that as a precondition to Seller's exercise of this termination right, Seller must also provide copies of such notice to the notice addresses set forth in Section 22 for Buyer with such copies addressed to the "President" and the "General Counsel" of Buyer. Such copies shall be sent by registered overnight delivery service or by certified or registered mail, return receipt requested and shall state prominently therein in type font no smaller than fourteen (14) point all-capital letters that "THIS IS A TERMINATION NOTICE UNDER A RENEWABLE PPA. YOU MUST CURE A DEFAULT, OR THE PPA WILL BE TERMINATED," and shall state therein any amount purported to be owed and wiring instructions, or the nature of any non-payment default alleged. Seller shall not have any right to terminate this Agreement if the default that gave rise to the termination right is cured within the

five (5) Business Days of Buyer's receipt of such notice. Further, during the continuation of default by the other Party, and until it has recovered all damages incurred on account of such default by the other Party, without exercising its termination right, a party may offset its damages against any payment due the other Party. The rights contemplated by this Section 11 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights. In the event of a termination hereof:

(a) Each Party shall pay to the other all amounts due the other hereunder for all periods prior to termination, subject to offset by the non-defaulting Party against damages incurred by such Party.

(b) The amounts due pursuant to Section 11.3(a) shall be calculated and paid within thirty (30) days after the billing date for such charges and shall bear interest thereon at the Contract Interest Rate from the date of termination until the date paid. The foregoing does not extend the due date of, or provide an interest holiday for, any payments otherwise due hereunder.

(c) Except in circumstances in which a remedy provided for in this Agreement is described as a Party's sole or exclusive remedy before and after the effective date of termination, the non-defaulting Party may pursue any and all legal or equitable remedies provided by law, equity or this Agreement (including Section 24.6).

(d) Without limiting the generality of the foregoing, the provisions of Sections 4.5, 5.4, 6.2.3, 6.3, 6.6.5, 6.6.6, 10.2, 10.3, 10.4, 10.5, 11.4, 11.5, 11.6, 12, 20.3 and 23 shall survive the termination hereof.

11.4 Termination of Duty to Buy: Memorandum of Agreement. If this Agreement is terminated because of a default by Seller, neither Seller, nor any successor to Seller with respect to the ownership of the Facility (for whom Seller acts herein as agent), may thereafter require or seek to require Buyer to purchase Output from the Facility under PURPA (on account of its status as a QF), or any other Requirements of Law, for any periods that would have been within the Term had this Agreement remained in effect. Seller, on behalf of itself and on behalf of any other entity on whose behalf it may act, hereby waives its rights to require Buyer to do so. On or before the Effective Date, the Parties shall execute and Buyer shall record at its cost, in the appropriate real property records of the counties in which the Facility or Premises are situated, and of the U.S. Bureau of Land Management or other federal agency as applicable, a memorandum in the form of **Exhibit 11.4** to provide constructive notice to third parties of Seller's agreements under this Section 11.4.

11.5 Termination Damages. If this Agreement is terminated as a result of an Event of Default by one of the Parties, termination damages shall be determined. Termination damages are in addition to all other amounts owed under this Agreement. The Termination Payment shall be calculated by the non-defaulting Party within a reasonable period after termination of the Agreement. The Termination Payment owed pursuant to this Section shall be due within five (5) Business Days after the non-defaulting Party gives the defaulting Party notice of the amount due. The non-defaulting Party shall under no circumstances be required to account for or otherwise credit or pay the defaulting Party for economic benefits accruing to the non-defaulting Party as a result of the defaulting Party's default. Buyer's rights with respect to a default by Seller under

Sections 11.1.1 and 11.1.2 are cumulative, such that the exercise of one or more rights shall not constitute a waiver of any other rights, with Seller remaining fully liable for any remaining deficiency.

11.6 Duty to Mitigate. Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance hereof. "Commercially reasonable efforts" by Seller shall require Seller to (i) use commercially reasonable efforts to maximize the price for energy received by Seller from third parties, including entering into an enabling agreement with, or being affiliated with, one or more power marketers of nationally recognized standing to market such Net Output (and associated RECs) not purchased or accepted by Buyer, and (ii) offering to sell to Buyer (prior to selling to any third party) the RECs associated with such Net Output at the REC Price Component to the extent permitted by the Generation Interconnection Agreement and Requirements of Law.

11.7 Security. Buyer may, in addition to pursuing any and all other remedies available at law or in equity, proceed against any security held by Buyer in whatever form to reduce any amounts that Seller owes Buyer arising from such default.

11.8 Cumulative Remedies. The rights and remedies provided to Buyer hereunder are cumulative and not exclusive of any rights or remedies of Buyer.

11.9 Right of First Offer for Facility Output. In the event of any termination hereof by Buyer pursuant to Section 11.1.2, in addition to Buyer's rights under this Agreement, Buyer shall have a right of first offer (the "**Covered Facility Right of First Offer**") to, and Buyer shall have a right of first offer on all of, the output of any solar-powered generation facility (a "**Covered Facility**") that from time to time may be constructed by Seller or any Affiliate of Seller on the Premises, up to (but not to exceed) an amount equal to the Expected Energy at the Contract Price.

The Covered Facility Right of First Offer shall be exercisable by Buyer through the earlier of (i) the date thirty (30) months following the date of Buyer's notice of termination, and (ii) the last day of the original Term had this Agreement not been terminated by Buyer. Seller shall provide Buyer with no less than fifteen (15) days' (but no more than twelve (12) months') prior written notice of the anticipated commercial operation date for any Solar Panels or Inverters constituting part of a Covered Facility and not previously subject to Buyer's Covered Facility Right of First Offer. Buyer shall notify Seller within sixty (60) days as to whether Buyer elects to purchase the output of such portions of the Covered Facility. If Buyer elects to purchase the output of such portions of the Covered Facility, such output (along with associated RECs) shall be sold to Buyer for the Contract Price that would have applied to Net Output and associated RECs purchased by Buyer hereunder had this Agreement remained in effect, at the rates indicated in Exhibit 5.1 until the last day of the original Term had this Agreement not been terminated by Buyer. Buyer shall not have a Covered Facility Right of First Offer (a) with respect to the output of any portion of the Covered Facility that has been offered to Buyer pursuant to this Section 11.9 on an earlier occasion and not been accepted by Buyer, or (b) with respect to any output that would cause the total output purchased by Buyer pursuant to its Covered Facility Right of First Offer to exceed the amount of the Expected Energy.

11.10 Damage Limitations. Seller's aggregate financial liability to Buyer for losses, damages and all other amounts, other than indemnities, hereunder with respect to the period prior to the Commercial Operation Date, shall not exceed an amount equal to the Credit Support amount for such period as described in Section 8; provided, however, losses, damages and all other amounts payable by Seller arising out of any of the following events shall not be subject to such limitation and shall not be counted toward such limitation (i) damage to Buyer-owned facilities proximately caused by negligence, breach of this Agreement, or willful misconduct by Seller, its directors, officers, employees and agents; (ii) Seller's intentional misrepresentation or intentional misconduct in connection with this Agreement or the operation of the Facility; (iii) the sale or diversion by Seller to a third party of any Net Output, RECs, Ancillary Services or Capacity Rights, excluding any sales in mitigation of damages; (iv) Seller's failure to maintain insurance coverages in the types and amounts required by this Agreement; (v) any claim for indemnification under this Agreement in connection with third-party claims; or (vi) damages incurred by Buyer in connection with any bankruptcy or insolvency proceeding involving Seller, including Buyer's loss of the benefit of its bargain due to rejection or other termination of this Agreement in such proceeding.

## SECTION 12 INDEMNIFICATION AND LIABILITY

### 12.1 Indemnities.

12.1.1. Indemnity by Seller. To the extent permitted by Requirements of Law and subject to Section 12.1.7, Seller shall release, indemnify and hold harmless Buyer, its Affiliates, and each of its and their respective directors, officers, employees, agents, and representatives (collectively, the "**Buyer Indemnitees**") against and from any and all losses, fines, penalties, claims, demands, damages, liabilities, actions or suits of any nature whatsoever (including legal costs and attorney's fees, both at trial and on appeal, whether or not suit is brought) (collectively, "**Liabilities**") actually or allegedly resulting from, or arising out of, or in any way connected with, the performance by Seller of its obligations hereunder, or relating to the Facility, for or on account of Environmental Contamination, or injury, bodily or otherwise, to, or death of, or damage to, or destruction or economic loss of property of, any person or entity, excepting only to the extent such Liabilities as may be caused by the negligence or willful misconduct of any person or entity within the Buyer Indemnitees. Seller shall be solely responsible for (and shall defend and hold Buyer harmless against) any damage that may occur as a direct result of Seller's breach of the Generation Interconnection Agreement.

12.1.2. Indemnity by Buyer. To the extent permitted by Requirements of Law and subject to Section 12.1.7, Buyer shall release, indemnify and hold harmless Seller, its Affiliates, and each of its and their respective directors, officers, employees, agents, and representatives (collectively, the "**Seller Indemnitees**") against and from any and all Liabilities resulting from, or arising out of, or in any way connected with, the performance by Buyer of its obligations hereunder for or on account of (i) injury, bodily or otherwise, to, or death of, or (ii) for damage to, or destruction of property of, any person or entity within the Seller Indemnitees, excepting only to the extent such Liabilities as may be caused by the negligence or willful misconduct of any person or entity within the Seller Indemnitees.

12.1.3. Additional Cross Indemnity. Without limiting Sections 12.1.1 and 12.1.2, and subject to Section 12.1.7, Seller shall release, indemnify and hold harmless the Buyer Indemnitees from and against all Liabilities related to Net Output prior to its delivery by Seller at the Point of Delivery, and Buyer shall release, indemnify and hold harmless the Seller Indemnitees from and against all Liabilities related to Net Output once delivered to Buyer at the Point of Delivery as provided herein, except in each case to the extent such Liabilities are attributable to the negligence or willful misconduct or a breach of this Agreement by any member of the Buyer Indemnitees or the Seller Indemnitees, respectively, seeking indemnification hereunder.

12.1.4. Defense. Promptly after receipt by a Party of any claim or notice of the commencement of any action, administrative, or legal proceeding, or investigation as to which the indemnity provided for in this Section 12 may apply, the indemnified Party shall notify the indemnifying Party in writing of such fact. The indemnifying Party shall assume the defense thereof with counsel designated by such Party and satisfactory to the indemnified Party, provided, however, that if the defendants in any such action include both the indemnified Party and the indemnifying Party and the indemnified Party shall have reasonably concluded that there may be legal defenses available to it which are different from or additional to, or inconsistent with, those available to the indemnifying Party, the indemnified Party shall have the right to select and be represented by separate counsel, at the indemnifying Party's expense.

12.1.5. Failure to Defend. If the indemnifying Party fails to assume the defense of a claim meriting indemnification, the indemnified Party may at the sole expense of the indemnifying Party, contest, settle, or pay such claim; provided however, that settlement or full payment of any such claim may be made only following consent of the indemnifying Party or, absent such consent, written opinion of the indemnified Party's counsel that such claim is meritorious or warrants settlement.

12.1.6. No Dedication. Nothing herein shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party hereto. No undertaking by one Party to the other under any provision hereof shall constitute the dedication of Buyer's facilities or any portion thereof to Seller or to the public, nor affect the status of Buyer or Seller as an independent individual or entity.

12.1.7. Consequential Damages. NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR SPECIAL, PUNITIVE, INDIRECT, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER SUCH DAMAGES ARE ALLOWED OR PROVIDED BY CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, STATUTE OR OTHERWISE. THE PARTIES AGREE THAT ANY LIQUIDATED DAMAGES, DELAY DAMAGES, BUYER AND SELLER COST TO COVER DAMAGES, SECTION 11.2.3 CAPACITY RIGHTS LOSS DAMAGES, INDEMNIFICATION FOR THIRD PARTY DAMAGES, OR OTHER SPECIFIED MEASURE OF DAMAGES EXPRESSLY PROVIDED FOR HEREIN, ARE NOT INTENDED BY THEM TO REPRESENT SPECIAL, PUNITIVE, INDIRECT, EXEMPLARY OR CONSEQUENTIAL DAMAGES.

## SECTION 13 INSURANCE

13.1 Required Policies and Coverages. Without limiting any liabilities or any other obligations of Seller hereunder, Seller shall secure and continuously carry with an insurance company or companies rated not lower than “A-” by the A.M. Best Company the insurance coverage specified on **Exhibit 13** during the periods specified on **Exhibit 13**.

13.2 Certificates and Certified Copies of Policies. Seller shall provide Buyer with a certified “true and correct” copy of the insurance policies, provisions and endorsements contemplated by **Exhibit 13** within ten (10) days after the date by which such policies are required to be obtained (as set forth in **Exhibit 13**). The certificate (a) shall not include the legend “certificate is not evidence of coverage” or any statement with similar effect, (b) the insurer shall have a firm obligation to provide Buyer with thirty (30) days prior written notice of coverage modifications (not merely an obligation to “endeavor” or words of similar effect), and (c) shall be endorsed by a person who has authority to bind the insurer. If any coverage is written on a “claims-made” basis, the certification accompanying the policy shall conspicuously state that the policy is “claims made.”

## SECTION 14 FORCE MAJEURE

14.1 Definition of Force Majeure. “**Force Majeure**” or “an event of Force Majeure” means an event that (a) is not reasonably anticipated as of the date hereof, (b) is not within the reasonable control of the Party affected by the event, (c) is not the result of such Party’s negligence or failure to act, and (d) could not be overcome by the affected Party’s use of due diligence in the circumstances. Force Majeure includes, but is not restricted to, events of the following types (but only to the extent that such an event, in consideration of the circumstances, satisfies the tests set forth in the preceding sentence): acts of God; fire; explosion; civil disturbance; epidemic; pandemic; sabotage; action or restraint by court order or public or government authority (as long as the affected Party has not applied for or assisted in the application for, and has opposed to the extent reasonable, such court or government action), or any failure or loss of the Facility’s main generator step-up transformer (provided Seller has used Prudent Electrical Practices in connection therewith). Notwithstanding the foregoing, none of the following constitute Force Majeure: (i) Seller’s ability to sell, or Buyer’s ability to purchase, Net Output, Ancillary Services, Capacity Rights, or RECs at a more advantageous price than is provided hereunder; (ii) the cost or availability or unavailability of fuel or motive force to operate the Facility; (iii) economic hardship, including lack of money; (iv) any breakdown or malfunction of Facility equipment (including any serial equipment defect) that is not directly caused by an independent event of Force Majeure; (v) the imposition upon a Party of costs or taxes allocated to such Party under Section 5; (vi) delay or failure of Seller to obtain or perform any Required Facility Document; (vii) curtailment or suspension of transmission or directive from the Transmission Provider or Interconnection Provider to curtail or suspend deliveries; (viii) a disconnection or interruption of interconnection service under the Generation Interconnection Agreement due to Seller’s breach thereof; (ix) maintenance upgrade or repair of any facilities or right of way corridors constituting part of or involving Interconnection Facilities, whether performed by or for Seller, or other third parties (except for repairs made necessary as a direct result of an event of Force Majeure); (x) Seller’s

failure to obtain, or perform under, the Generation Interconnection Agreement, or its other contracts and obligations to Transmission Provider or Interconnection Provider; (xi) any event attributable to the use of Interconnection Facilities for deliveries of Output to any party other than Buyer; or (xii) failure of Seller to take any action, or refrain from taking any action, in accordance with all applicable Permits, including any required environmental mitigation measures. Notwithstanding anything to the contrary herein, in no event will the increased cost of electricity, transmission, Solar Panels or tariffs or taxes thereupon, steel, labor, or transportation, or changes in taxes or tax laws, including the cessation or termination of any tax credits or tax rebates, constitute an event of Force Majeure.

14.2 Suspension of Performance. If either Party is rendered wholly or in part unable to perform its obligations hereunder because of an event of Force Majeure, both Parties shall be excused from the performance affected by the event of Force Majeure, provided that:

14.2.1. the Party affected by the Force Majeure, shall, within five (5) days after the occurrence of the event of Force Majeure, give the other Party written notice describing the particulars of the event; and

14.2.2. the suspension of performance shall be of no greater scope and of no longer duration than is required to remedy the effect of the Force Majeure; and

14.2.3. the affected Party shall use diligent efforts to remedy its inability to perform.

14.3 Force Majeure Does Not Affect Other Obligations. No obligations of either Party that arose before the Force Majeure causing the suspension of performance or that arise after the cessation of the Force Majeure shall be excused by the Force Majeure.

14.4 Strikes. Notwithstanding any other provision hereof, neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

14.5 Right to Terminate. If a Force Majeure event prevents a Party from substantially performing its obligations hereunder for a period exceeding two hundred ten (210) consecutive days (despite the affected Party's effort to take all reasonable steps to remedy the effects of the Force Majeure with all reasonable dispatch), then the Party not affected by the Force Majeure event, with respect to its obligations hereunder, may terminate this Agreement by giving ten (10) days prior notice to the other Party. Upon such termination, neither Party will have any liability to the other with respect to the period following the effective date of such termination; provided, however, that this Agreement will remain in effect to the extent necessary to facilitate the settlement of all liabilities and obligations arising hereunder before the effective date of such termination.

## SECTION 15 OBLIGATION TO NEGOTIATE

Upon the expiration of this Agreement at the end of its full Term on the twentieth (20<sup>th</sup>) anniversary of the Commercial Operation Date, or if terminated earlier pursuant to a default by

Buyer, Buyer and Seller shall negotiate in good faith to enter into a transmission agreement whereby Buyer shall provide transmission service to Seller for the delivery of Output to the interconnection of Buyer's System with the System. Seller shall be solely responsible for all costs of such transmission service, including any system upgrades, line losses, transmission costs on Buyer's system and scheduling and transmission costs related to the System Operator. Seller shall indemnify and hold harmless Buyer against any and all losses, liabilities, damages, and claims suffered or incurred by Buyer as a result of Buyer providing such transmission services to Seller.

## **SECTION 16 CHOICE OF LAW**

This Agreement shall be interpreted and enforced in accordance with the laws of the Commonwealth of Kentucky, excluding any choice of law rules that may direct the application of the laws of another jurisdiction. The Parties intend that this Agreement be a "forward contract" between two "forward contract merchants" within the meanings given such terms in the United States Bankruptcy Code; provided that neither Party shall be in breach of this Agreement if a court determines that is not the case.

## **SECTION 17 PARTIAL INVALIDITY**

The Parties do not intend to violate any laws governing the subject matter hereof. If any of the terms hereof are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms hereof shall remain in effect. The Parties shall use best efforts to amend this Agreement to reform or replace any terms determined to be invalid, illegal or void, such that the amended terms (a) comply with and are enforceable under applicable law, (b) give effect to the intent of the Parties in entering hereinto, and (c) preserve the balance of the economics and equities contemplated by this Agreement in all material respects.

## **SECTION 18 SEVERAL OBLIGATIONS; NON-WAIVER**

18.1 Several Obligations. Nothing contained herein shall be construed to create an association, trust, partnership or joint venture or to impose a trust, partnership or fiduciary duty, obligation or liability on or between the Parties.

18.2 Non-Waiver. No waiver of any provision hereof shall be effective unless the waiver is set forth in a writing that (a) expressly identifies the provision being waived, and (b) is executed by the Party waiving the provision. A Party's waiver of one or more failures by the other Party in the performance of any of the provisions hereof shall not be construed as a waiver of any other failure, whether of a like kind or different nature.

## **SECTION 19 GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS**

This Agreement is subject to the jurisdiction of those Governmental Authorities having control over either Party or this Agreement. During the Term, Seller shall maintain all material Permits required, as applicable, for the construction, operation, or ownership of the Facility.



## SECTION 20 SUCCESSORS AND ASSIGNS

20.1 Restriction on Assignments. Except as expressly provided in this Section 20, neither Party may assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Party.

### 20.2 Assignment.

20.2.1. Binding Nature. This Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of the Parties hereto.

20.2.2. Permitted Assignments. Notwithstanding Section 20.1, either Party may, without the need for consent from the other Party (but with notice to the other Party, including the names of the assignees), (a) transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds therefrom in connection with any financing or other financial arrangements; (b) transfer or assign this Agreement to an Affiliate of such Party that is a Qualified Transferee; or (c) transfer or assign this Agreement to any party to whom a Controlling Interest in Seller has been sold, transferred or assigned, subject to the limitation in Section 20.2.3; provided, however, that Seller shall not transfer, sell, encumber or assign this Agreement or any interest herein to any Affiliate of Buyer without the prior written consent of Buyer. Except with respect to collateral assignments for financing purposes and also except as otherwise provided above in the immediately preceding sentence, in every assignment hereof, (i) the assignee must agree in writing to be bound by the terms and conditions hereof, and be a Qualified Transferee, and (ii) the assignor shall remain liable for its obligations hereunder. The Party seeking to assign or transfer this Agreement shall be solely responsible for paying all costs of assignment. Notwithstanding anything to the contrary herein, no consent of Buyer nor any rights or obligations described in Section 20.4 shall be required in connection with any of the following transactions: (i) transfer or sale of Seller to EEV or EEV's Affiliates, (ii) any Tax Equity Financing, or (iii) a change of control of National Grid plc.

20.2.3. Controlling Interest in Seller. Except as described in the last sentence of Section 20.2.2, (i) no Controlling Interest in Seller may be sold, transferred or assigned (whether through a single transaction or a series of transactions over time) without Buyer's prior written approval, not to be unreasonably withheld, of the transferee with respect to such Controlling Interest, and (ii) without limiting the foregoing, any such sale, transfer, or assignment must be to a Qualified Transferee.

20.3 Assignment to RUS. The RUS is a lender to Buyer. Notwithstanding any other provision of this Agreement to the contrary, Buyer, without the approval of Seller, may assign, transfer, mortgage or pledge this Agreement to create a security interest for the benefit of the United States of America (the "**Government**"), acting through the Administrator of the RUS (the "**Administrator**"), and its other lenders. Thereafter, the Administrator or such other lenders, without the approval of Seller, may (a) cause this Agreement to be sold, assigned, transferred, or otherwise disposed of to a third party pursuant to the remedies with respect to such security interest or in lieu of the exercise of such remedies in connection with a debt settlement, or (b) if the Government first acquires this Agreement pursuant to 7 U.S.C § 907, sell, assign, transfer or

otherwise dispose of this Agreement to a third party; *provided*, that in either case at the time of such initial disposition (i) Buyer is in default of its obligations to the Government or such other lenders that are secured by such security interest and the Administrator or such other lender has given Seller notice of such default; and (ii) the Administrator or such other lender has given thirty (30) days' prior notice of its intention to sell, assign, transfer or otherwise dispose of this Agreement indicating the identity of the intended third party assignee or purchaser. No permitted sale, assignment, transfer, mortgage, pledge or other disposition under this Section 20.3 shall release or discharge Buyer from its obligations under this Agreement.

#### 20.4 Right of First Offer of Sale of the Facility.

20.4.1. Offered Assets. If Seller intends to sell the Facility or any part of the Facility or to sell (individually or in the aggregate) a Controlling Interest in Seller or the Facility (the "**Offered Assets**"), it shall first offer the Offered Assets to Buyer. Seller's offer shall set forth the terms and conditions of the offer in writing and in reasonable detail. Seller shall promptly answer any questions that Buyer may have concerning the offered terms and conditions and shall meet with Buyer to discuss the offer. The provisions of this Agreement will bind any successor or transferee of Seller as if such successor or transferee were the Seller.

20.4.2. Buyer's Rejection of Offer; Revival of Offer. If Buyer does not accept the offered terms and conditions within sixty (60) days after receiving Seller's offer, Seller may (subject to Buyer's rights under Section 20.2) enter into an agreement to sell the Offered Assets to a third party on terms and conditions no more favorable in the aggregate to the third party than those offered to Buyer. If Seller wishes to enter into an agreement with a third party on terms more favorable to the third party than those previously offered to Buyer under this Section, Seller shall first offer the revised terms and conditions to Buyer under this Section 20.4.

20.4.3. Buyer's Acceptance of Offer. If Buyer accepts an offer made by Seller under this Section, the Parties shall within a further sixty (60) days enter into an acquisition agreement that incorporates the terms and conditions of Seller's offer.

### SECTION 21 ENTIRE AGREEMENT

This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding the subject matter hereof. No modification hereof shall be effective unless it is in writing and executed by both Parties.

### SECTION 22 NOTICES

22.1 Addresses and Delivery Methods. All notices, requests, statements or payments shall be made to the addresses set out below. In addition, copies of a notice of termination of this Agreement under Section 11.3 shall contain the information required by Section 11.3 and shall be sent to the then-current President and General Counsel of Buyer. Notices required to be in writing shall be delivered by letter, electronic mail, facsimile or other documentary form. Notice by electronic mail, facsimile or hand delivery shall be deemed to have been given when received or

hand delivered. Notice by overnight mail or courier shall be deemed to have been given on the date and time evidenced by the delivery receipt.

To Seller: Henderson Solar, LLC  
c/o Geronimo Energy, LLC  
8400 Normandale Lake Boulevard, Suite 1200  
Bloomington, MN 55437  
Attention: General Counsel  
[REDACTED]  
[REDACTED]

with a copy to: Fredrikson & Byron P.A.  
200 South Sixth Street, Suite 4000  
Minneapolis, MN 55402  
[REDACTED]  
[REDACTED]  
Fax: 612-492-7077  
[REDACTED]

To Buyer: Robert W. Berry  
President & CEO  
Big Rivers Electric Corporation  
201 Third Street, P.O. Box 24  
Henderson, KY 42419-0024  
[REDACTED]  
Fax: 270-827-2558

with a copy to: Legal Department  
Big Rivers Electric Corporation  
201 Third Street, P.O. Box 24  
Henderson, KY 42419-0024  
[regulatory@bigrivers.com](mailto:regulatory@bigrivers.com)  
Fax: 270-827-2558

22.2 Changes of Address. The Parties may change any of the persons to whom notices are addressed, or their addresses, by providing written notice in accordance with this Section.

22.3 Notices to Senior Lenders. The requirements concerning notice by Buyer to Senior Lenders, if any, are set forth in the Lender Consent, if any.

### SECTION 23 CONFIDENTIALITY

23.1 Confidential Business Information. The following constitutes “**Confidential Business Information**,” whether oral or written: (a) the Parties’ proposals and negotiations concerning this Agreement, made or conducted prior to the Effective Date, (b) the terms hereof, (c) information provided under Section 6.10.1, (d) the actual charges billed to Buyer hereunder, (e) any information delivered by Buyer to Seller prior to the Effective Date relating to the market prices of energy or RECs and methodologies for their determination or estimation, (f) information provided by one Party to the other pursuant hereto, (g) all negotiations pursuant to Section 24.1

and (h) any of the foregoing delivered by an Affiliate of a Party or employee or agent thereof to the other Party or an Affiliate of that party or employee or agent thereof. Seller and Buyer each agree to hold such Confidential Business Information wholly confidential, except as provided herein. Such Confidential Business Information may only be used by the Parties for purposes related to the approval, administration or enforcement hereof and for no other purpose.

23.2 Duty to Maintain Confidentiality. Each Party agrees not to disclose Confidential Business Information to any other person (other than its members, Affiliates, counsel, auditors, consultants, lenders, prospective lenders, purchasers, prospective purchasers, contractors constructing or providing services to the Facility, employees, officers and directors who agree to be bound by the provisions of this Section), without the prior written consent of the other Party; *provided however*, that: (a) either Party may disclose Confidential Business Information, if and to the extent such disclosure is required: (i) by Requirements of Law, (ii) in order for Buyer to receive regulatory recovery of expenses related to this Agreement, (iii) pursuant to an order of a court or regulatory agency, or (iv) in order to enforce this Agreement or to seek approval hereof, and (b) notwithstanding any other provision hereof, Buyer may in its sole discretion disclose or otherwise use for any purpose in its sole discretion the Confidential Business Information described in Section 23.1(d) or 23.1(e).

23.3 Buyer Regulatory Compliance. The Parties acknowledge that Buyer is required by law or regulation to report certain information that could embody Confidential Business Information from time to time. Such reports may include models, filings, reports of Buyer's net power costs, general rate case filings, power cost adjustment mechanisms, FERC-required reporting such as those made on FERC Form 1, Form 12, or Form 714, market power and market monitoring reports, annual state reports that include resources and loads, integrated resource planning reports, reports to entities such as NERC, MISO, RE, a GIS, RUS, or similar or successor organizations, forms, filings, or reports, the specific names of which may vary by jurisdiction, along with supporting documentation. Additionally, in regulatory proceedings in all state and federal jurisdictions in which it does business, Buyer will from time to time be required to produce Confidential Business Information. Notwithstanding any provision of this Agreement to the contrary, Buyer may use its business judgment in its compliance with all of the foregoing and the appropriate level of confidentiality it seeks for such disclosures, and Buyer may submit Confidential Business Information in regulatory proceedings or filings without notice to Seller.

23.4 Irreparable Injury; Remedies. Each Party agrees that violation of the terms of this Section 23 constitutes irreparable harm to the other, and that the harmed Party may seek any and all remedies available to it at law or in equity, including injunctive relief.

23.5 News Releases and Publicity. Before Seller issues any news release or publicly distributed promotional material regarding the Facility, Seller shall first provide a copy thereof to Buyer for its review and approval. Any use of Buyer's name in such news release or promotional material requires Buyer's prior written consent. Seller may make such public statements, filings and provide other materials publicly in connection with obtaining Permits and other Required Facility Documents without being in violation of this Section 23.5, subject to Sections 3.2.9 and 4.5 hereof.

## SECTION 24 DISPUTE RESOLUTION

24.1 Negotiations. The Parties shall attempt in good faith to resolve all disputes arising out of, related to or in connection with this Agreement promptly by negotiation, as follows. Any Party may give the other Party written notice of any dispute not resolved in the normal course of business. Executives of both Parties at least one level above the personnel who have previously been involved in the dispute shall meet at a mutually acceptable time and place within ten (10) days after delivery of such notice, and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute. If the matter has not been resolved within thirty (30) days after the referral of the dispute to such senior executives, or if no meeting of such senior executives has taken place within fifteen (15) days after such referral, either Party may initiate litigation as provided hereinafter if neither Party has requested that the dispute be mediated in accordance with Section 24.2 below. All negotiations pursuant to this clause are confidential.

24.2 Mediation. If the dispute is not resolved within thirty (30) days after the referral of the dispute to senior executives, or if no meeting of senior executives has taken place within fifteen (15) days after such referral, either Party may request that the matter be submitted to nonbinding mediation. If the other Party agrees, the mediation will be conducted in accordance with the Construction Industry Arbitration Rules and Mediation Procedures (including Procedures for Large, Complex Construction Disputes) of the AAA, as amended and effective on July 1, 2015 (the “**Mediation Procedures**”), notwithstanding any Dollar amounts or Dollar limitations contained therein.

(a) The Party requesting the mediation, may commence the mediation process with AAA by notifying AAA and the other Party in writing (“**Mediation Notice**”) of such Party’s desire that the dispute be resolved through mediation, including therewith a copy of the Dispute Notice and the response thereto, if any, and a copy of the other Party’s written agreement to such mediation.

(b) The mediation shall be conducted through, by and at the office of AAA located in the Mediation Location.

(c) The mediation shall be conducted by a single mediator. The Parties may select any mutually acceptable mediator. If the Parties cannot agree on a mediator within five (5) days after the date of the Mediation Notice, then the AAA’s Arbitration Administrator shall send a list and resumes of three (3) available mediators to the Parties, each of whom shall strike one name, and the remaining person shall be appointed as the mediator. If more than one name remains, either because one or both Parties have failed to respond to the AAA’s Arbitration Administrator within five (5) days after receiving the list or because one or both Parties have failed to strike a name from the list or because both Parties strike the same name, the AAA’s Arbitration Administrator will choose the mediator from the remaining names. If the designated mediator shall die, become incapable or, unwilling to, or unable to serve or proceed with the mediation, a substitute mediator shall be appointed in accordance with the selection procedure described above in this Section 24.2(c), and such substitute mediator shall have all such powers as if he or she has been originally appointed herein.

(d) The mediation shall consist of one or more informal, nonbinding meetings between the Parties and the mediator, jointly and in separate caucuses, out of which the mediator will seek to guide the Parties to a resolution of the Dispute. The mediation process shall continue until the resolution of the dispute, or the termination of the mediation process pursuant to Section 24.2(f). The costs of the mediation shall be borne equally by the Parties, provided that the Parties shall each bear their own expenses and attorney fees.

(e) All verbal and written communications between the Parties and issued or prepared in connection with this Section 24.2 shall be deemed prepared and communicated in furtherance, and in the context, of dispute settlement, and shall be exempt from discovery and production, and shall not be admissible in evidence (whether as admission or otherwise) in any litigation or other proceedings for the resolution of the dispute.

(f) The initial mediation meeting between the Parties and the mediator shall be held within twenty (20) days after the Mediation Notice. Either Party may terminate the mediation process upon or after the earlier to occur of (A) the failure of the initial mediation meeting to occur within twenty (20) days after the date of the Mediation Notice, (B) the passage of thirty (30) days after the date of the Mediation Notice without the dispute having been resolved, or (C) such time as the mediator makes a finding that there is no possibility of resolution through mediation.

(g) All deadlines specified in this Section 24.2 may be extended by mutual agreement.

24.3 Place of Contract Formation; Choice of Forum. Seller and Buyer acknowledge and agree that this Agreement has been made and entered into as of the date first set forth above in the Mediation Location. Each Party irrevocably consents and agrees that any legal action or proceeding arising out of this Agreement or the actions of the Parties leading up to the Agreement shall be brought exclusively in the state and federal courts in or for Henderson County, Kentucky except for matters within the exclusive jurisdiction of a Governmental Authority. Except for matters within the exclusive jurisdiction of a different Governmental Authority, by execution and delivery hereof, each Party (a) accepts the exclusive jurisdiction of such courts and waives any objection that it may now or hereafter have to the exercise of personal jurisdiction by such courts over each Party for the purpose of any proceeding related to this Agreement, (b) irrevocably agrees to be bound by any final judgment (after any and all appeals) of any such courts arising out of such documents or actions, (c) irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceedings arising out of such documents brought in such courts (including any claim that any such suit, action or proceeding has been brought in an inconvenient forum) in connection herewith, (d) agrees that service of process in any such action may be effected by mailing a copy thereof by registered or certified mail, postage prepaid, to such Party at its address as set forth herein and (e) agrees that nothing herein shall affect the right to effect service of process in any other manner permitted by law.

24.4 Settlement Discussions. No statements of position or offers of settlement made in the course of the dispute resolution process described in this Section may be offered into evidence for any purpose in any litigation between the Parties, nor will any such statements or offers of

settlement be used in any manner against either Party in any such litigation. Further, no such statements or offers of settlement shall constitute an admission or waiver of rights by either Party in connection with any such litigation. At the request of either Party, any such statements and offers of settlement, and all copies thereof, shall be promptly returned to the Party providing the same.

24.5 Waiver of Jury Trial. EACH PARTY KNOWINGLY, VOLUNTARILY, INTENTIONALLY AND IRREVOCABLY WAIVES THE RIGHT TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED ON THIS AGREEMENT, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT AND ANY AGREEMENT EXECUTED OR CONTEMPLATED TO BE EXECUTED IN CONJUNCTION WITH THIS AGREEMENT, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN) OR ACTIONS OF ANY PARTY HERETO. THIS PROVISION IS A MATERIAL INDUCEMENT TO EACH OF THE PARTIES FOR ENTERING HEREINTO. EACH PARTY HEREBY WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR ANY OTHER AGREEMENT EXECUTED OR CONTEMPLATED TO BE EXECUTED IN CONJUNCTION WITH THIS AGREEMENT, OR ANY MATTER ARISING HEREUNDER OR THEREUNDER, WITH ANY PROCEEDING IN WHICH A JURY TRIAL HAS NOT OR CANNOT BE WAIVED.

24.6 Specific Performance. Buyer shall be entitled to seek and obtain a decree compelling specific performance or granting injunctive relief with respect to, and shall be entitled, to enjoin any actual or threatened breach of any material obligation of Seller. The Parties agree that specific performance (including temporary and preliminary relief) and injunctive relief are proper in the event of any actual or threatened breach of any material obligation, and that any liability limits contained herein shall not operate to limit the exercise of Buyer's remedies in equity to cause Seller to perform its obligations hereunder. Seller agrees that it will not assert as a defense to Buyer's action for specific performance of, or injunctive relief relating to, Seller's obligations hereunder that the amounts payable or paid by Seller in respect of liquidated damages constitute an adequate remedy for the breach of such obligation, and Seller hereby conclusively waives such defense. Seller shall at all times during the Term, own, lease, control, hold in its own name or be signatory to (as the case may be) all assets and Required Facility Documents relating to the Facility to the extent necessary to prevent a material adverse effect on Buyer's right to specific performance or injunctive relief.

*[Signature page follows]*

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed in their respective names as of the date first above written.

HENDERSON SOLAR, LLC

By:   
Name: SIGBEE NIXON  
Title: CEO

BIG RIVERS ELECTRIC CORPORATION

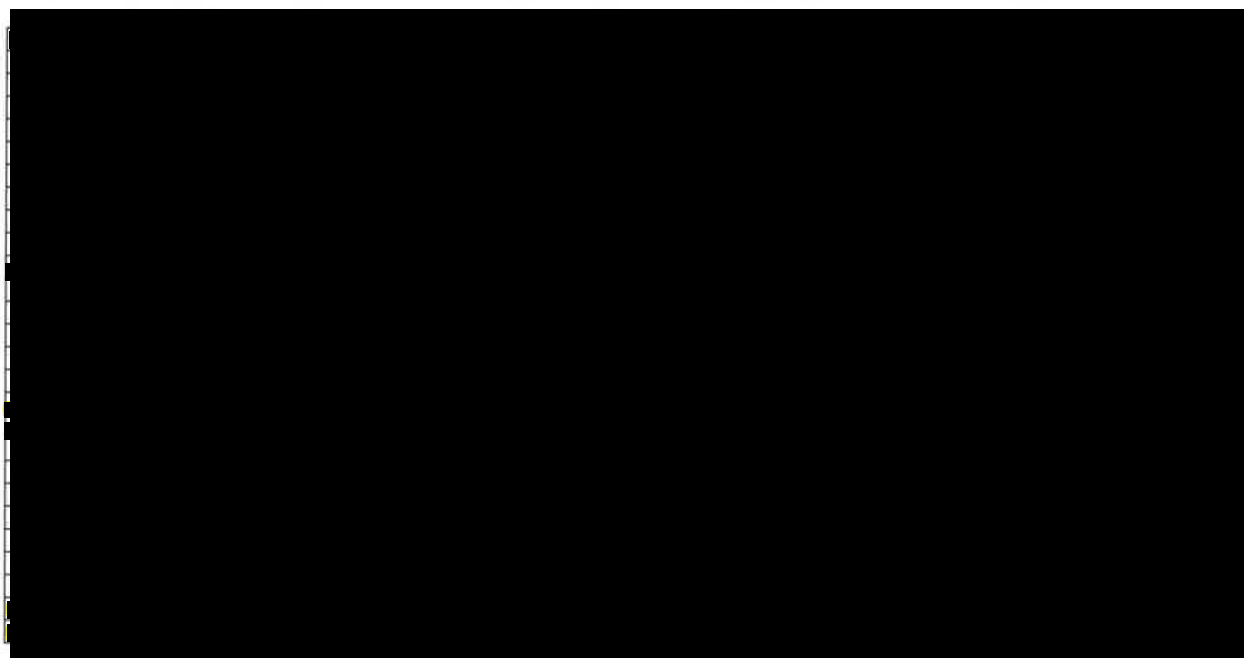
By:   
Name: Robert W. Berry  
Title: President and CEO



## EXHIBIT A

### ESTIMATED OUTPUT

Seller to provide one (1) electronic and hard copy of the solar plant performance estimation report using PVSYST or a comparable solar performance modeling program including, at a minimum, estimated hourly MW generation output in MWh/h for the site and Facility. Upon Commercial Operations, Seller shall provide updated Exhibit A based on completed construction and Seller's designated Licensed Professional Engineer will provide certification as part of Commercial Operations that the estimated energy output included in this Exhibit A is correct as calculated using PVSYST or comparable solar performance modeling program.



All amounts are based on an estimate of the first full Contract Year, which shall be reduced by an annual degradation factor of **0.5%** per Contract Year.

# EXHIBIT B

## EXAMPLE OF CALCULATIONS OF DELAY DAMAGES

For the purposes of this example only, assume the following:

(Note: These assumptions are illustrative only. Actual terms are as defined in this Agreement)

“C” = Facility Energy Output in MW<sub>h</sub>s

Buyer’s Cost to Cover (“A”) = as set forth in the table below

Scheduled Commercial Operation Date: [REDACTED]

Date on which Delay Damages begin to accrue: [REDACTED]

Actual Commercial Operation Date: [REDACTED]

	A	B
	Buyer’s Cost to Cover	Delay Damages (A x C / 365)
DATE		
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Total Delay Damages [REDACTED]

## EXHIBIT C

### NERC EVENT TYPES

Event Type	Description of Outages
U1 <sup>1</sup>	<u>Unplanned (Forced) Outage—Immediate</u> – An outage that requires immediate removal of a unit from service, another outage state or a Reserve Shutdown state. This type of outage results from immediate mechanical/electrical/hydraulic control systems trips and operator-initiated trips in response to unit alarms.
U2 <sup>1</sup>	<u>Unplanned (Forced) Outage—Delayed</u> – An outage that does not require immediate removal of a unit from the in-service state but requires removal within six (6) hours. This type of outage can only occur while the unit is in service.
U3 <sup>1</sup>	<u>Unplanned (Forced) Outage—Postponed</u> – An outage that can be postponed beyond six hours but requires that a unit be removed from the in-service state before the end of the next weekend. This type of outage can only occur while the unit is in service.
SF <sup>1</sup>	<u>Startup Failure</u> – An outage that results from the inability to synchronize a unit within a specified startup time period following an outage or Reserve Shutdown. A startup period begins with the command to start and ends when the unit is synchronized. An SF begins when the problem preventing the unit from synchronizing occurs. The SF ends when the unit is synchronized or another SF occurs.
MO	<u>Maintenance Outage</u> – An outage that can be deferred beyond the end of the next weekend, but requires that the unit be removed from service before the next planned outage. (Characteristically, a MO can occur any time during the year, has a flexible start date, may or may not have a predetermined duration and is usually much shorter than a PO.)
ME	<u>Maintenance Outage Extension</u> – An extension of a maintenance outage (MO) beyond its estimated completion date. This is typically used where the original scope of work requires more time to complete than originally scheduled. Do not use this where unexpected problems or delays render the unit out of service beyond the estimated end date of the MO.
PO	<u>Planned Outage</u> – An outage that is scheduled well in advance and is of a predetermined duration, lasts for several weeks and occurs only once or twice a year. (Boiler overhauls, turbine overhauls or inspections are typical planned outages.)
PE	<u>Planned Outage Extension</u> – An extension of a planned outage (PO) beyond its estimated completion date. This is typically used where the original scope of work requires more time to complete than originally scheduled. Do not use this where unexpected problems or delays render the unit out of service beyond the estimated end date of the PO.

<sup>1</sup> These event types are all contributors to the FOR & EFOR calculations in the reports section.

## EXHIBIT D

### EXAMPLE CALCULATION OF BUYER'S COST TO COVER

Buyer's Cost to Cover is calculated as follows:

*(Average DALMP Price + [RECs replacement price or REC Price Component]) – Contract Price.*

Example:

For a given Calculation Period, assume the following:

A. Average DALMP Price: [REDACTED]

B. Buyer, after using commercially reasonable efforts to do so, was unable to replace the RECs.

C. Contract Price then in effect: [REDACTED].

Buyer's Cost to Cover is therefore calculated as follows:

[REDACTED]

## **EXHIBIT E**

### **APPROVED LICENSED PROFESSIONAL ENGINEERS**

- ICF International, Inc.;
- Leidos Holdings Inc.;
- Black & Veatch Holding Company;
- John Wood Group PLC; and
- DNV GL AS.

## EXHIBIT F

### PERMITS

*[Include without limitation all Federal Energy Regulatory Commission authorizations and determinations, all other federal findings and determinations, including any applicable provided by the Federal Aviation Administration, Bureau of Land Management and the U.S. Army Corp of Engineers, and all tribal, state and local siting, zoning, water rights and other permits. The foregoing list includes examples only and should in no way be considered exclusive or limiting.]*

#### Required Permits

- Henderson County:
  - Site Plan Review and Approval
  - Building Permit
  - Electrical Permit
- Kentucky Electric Generation and Transmission Siting Board:
  - Merchant Electric Generation Facility Construction Certificate
  - Nonregulated Electric Transmission Line Construction Certificate
- Kentucky Energy and Environmental Cabinet
  - Cumulative Environmental Assessment
  - Right-of-Way Permit
- Federal Emergency Regulatory Commission
  - Exempt Wholesale Generator Certification
  - Qualifying Facilities Certification
  - Market Based Rate Authorization

#### Additional Permits/Approvals

- Henderson County:
  - Driveway Permit
  - Right-of-Way Permit
  - Floodplain Development Permit
- Kentucky Transportation Council
  - Encroachment Permit
  - Entrance Permit
  - Overweight/Oversize Permit
- Kentucky Department of Housing, Buildings, and Construction
  - Building Permit

- Electrical Permit
- Kentucky Department for Environmental Protection
  - Water Quality Certification
  - Kentucky Pollutant Discharge Elimination System Permit
  - State Floodplain Construction Permit
  - Air Quality Permit or Registration
  - Waste Permit
- Federal Aviation Administration
  - Determinations of No Hazard
- Federal Emergency Management Agency
  - Floodplain Development Permit
- U.S. Army Corp of Engineers
  - Wetland Delineation Approval
  - Jurisdictional Determination
  - Section 404 Permit

**EXHIBIT 2.2**

**CONSTRUCTION MILESTONES**

Detailed construction schedule submitted as separate attachment.



**EXHIBIT 2.6**

**BUYER'S INITIAL DESIGNATED REPRESENTATIVES**

1. Authorized Representatives.

Buyer: Russ Pogue  
Manager of Member Relations  
Big Rivers Electric Corporation  
201 Third Street, P.O. Box 24  
Henderson, KY 42419-0024  
Office: 270-844-6159

[REDACTED]  
[REDACTED]

**EXHIBIT 3.2.6**

**REQUIRED FACILITY DOCUMENTS  
(To be completed prior to the Commercial Operation Date)**

**1. Obtained Required Facility Documents:**

Licenses, Permits and Authorizations:

Including any of the same identified on Exhibit F.

Construction and Operations and Maintenance:

Land Rights:

**2. To Be Obtained Required Facility Documents:**

Licenses, Permits and Authorizations:

Including any of the same identified on Exhibit F.

Construction Agreements:

Generator Interconnection Agreement:

Operations and Maintenance Agreements:

[should also include easements, crossing agreements, subordination agreements (i.e., agricultural leases), estoppels, non-interference, or indemnity agreements; such further documents as internal review further requires.]

**EXHIBIT 4.5**

**REC ATTESTATION AND BILL OF SALE**

[ \_\_\_\_\_ ] (“Seller”) hereby sells, transfers and delivers to Buyer the RECs (including all Environmental Attributes and Environmental Attribute Reporting Rights) associated with the generation and delivery of energy to Buyer under the Power Purchase Agreement (Renewable Energy-Solar) between Seller and Buyer dated [ \_\_\_\_\_ ] (the “PPA”), as described below, in the amount of one REC for each megawatt hour generated. Defined terms used in this REC Attestation and Bill of Sale (as indicated by initial capitalization) shall have the meaning set forth in the PPA.

Facility name and location: \_\_\_\_\_ Fuel Type: Solar  
Capacity (MW AC): \_\_\_\_\_ Operational Date: \_\_\_\_\_  
Energy Admin. ID no.: \_\_\_\_\_

<u>Dates</u>	<u>MWh generated</u>
_____	_____

Seller further attests, warrants and represents, under penalty of perjury, as follows:

- i) to the best of its knowledge, the information provided herein is true and correct;
- ii) its sale to Buyer is its one and only sale of all or any part of the RECs referenced herein;
- iii) the Facility generated and delivered to the grid the energy in the amount indicated above pursuant to the PPA; and
- iv) to the best of Seller’s knowledge, each of the RECs associated with the generation of energy for delivery under the PPA have been generated and sold by the Facility.

This REC Attestation and Bill of Sale confirms, in accordance with the PPA, the transfer from Seller to Buyer all of Seller’s right, title and interest in and to the REC associated with the generation of the energy from the Facility under the PPA as set forth above.

Seller's Contact Person: [ \_\_\_\_\_ ]

WITNESS MY HAND,

[SELLER],

a [ \_\_\_\_\_ ] [ \_\_\_\_\_ ]

By \_\_\_\_\_

Its \_\_\_\_\_

Date: \_\_\_\_\_

This Attestation may be disclosed by Seller and Buyer to others, including the Center for Resource Solutions, and the public utility commissions having jurisdiction over Buyer, to substantiate and verify the accuracy of Buyer's advertising and public communication claims, as well as in Buyer's advertising and other public communications.

**EXHIBIT 5.1**

**CONTRACT PRICE**

The Contract price is \$29.60 / MWh throughout the Term.

**EXHIBIT 6.1**

**DESCRIPTION OF FACILITY AND PREMISES  
(To be completed prior to the Commercial Operation Date)**

Seller's Facility consists of \_\_\_\_\_ panels rated at \_\_\_\_\_ watts AC manufactured by \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_-inverters manufactured by \_\_\_\_\_, and \_\_\_\_\_ tracking system (if applicable) manufactured by \_\_\_\_\_. More specifically, the Facility includes:

Type (synchronous or inductive): Synchronous

A. Manufacturer's Nameplate Data:

Solar Panels

Manufacturer: \_\_\_\_\_  
Model: \_\_\_\_\_  
Power rating (Watts DC @ STC): \_\_\_\_\_  
Number of Modules: \_\_\_\_\_  
Number of Modules per string: \_\_\_\_\_  
Module warranty (year 10) (% of new): \_\_\_\_\_  
Module warranty (year 25) (% of new): \_\_\_\_\_

Inverters

Manufacturer: \_\_\_\_\_  
Model: \_\_\_\_\_  
Inverter Rating (AC, kW): \_\_\_\_\_ --  
Number of Inverters: \_\_\_\_\_  
Inverter Efficiency at Full Power Rating(%): \_\_\_\_\_  
Inverter Capacity for Site (AC, kW): \_\_\_\_\_  
Operation Voltage (Volts): \_\_\_\_\_  
Maximum System Design Voltage - \_\_\_\_\_ (Volts)  
Number of Phases: \_\_\_\_\_

Mounting

Fixed tilt or Single-axis Tracking? \_\_\_\_\_  
Proposed Module orientation (landscape, portrait) \_\_\_\_\_  
Tilt Angle (Degrees): \_\_\_\_\_  
Azimuth (Degrees): \_\_\_\_\_  
Pitch (Row Spacing) (Feet): \_\_\_\_\_  
Row Width (Feet): \_\_\_\_\_  
Row Length (Feet): \_\_\_\_\_  
Max/min rotation (if tracking) (Degrees): \_\_\_\_\_  
Ground Coverage Ratio: \_\_\_\_\_

Power Consumption requirements (for tracking) (kWhs/Day) \_\_\_\_\_

PV Array Characteristics:

Rated Output (kW): \_\_\_\_\_ Rated Output (kVA): \_\_\_\_\_

Rated Voltage (line to line): \_\_\_\_\_

Rated Current (A): Stator: Converter Supply Current: \_\_\_\_\_ ; Rotor: \_\_\_\_\_

Maximum kW Output: \_\_\_\_\_ kW Maximum kVA Output: \_\_\_\_\_ kVA

Transformation

Number of Step-up transformers: \_\_\_\_\_

Size of Step-up Transformers (kVA): \_\_\_\_\_

Low Side voltage of Step-up transformer (volts): \_\_\_\_\_

High Side voltage of Step up transformer (volts): \_\_\_\_\_

Total land required: \_\_\_\_\_ acres

Power factor requirements:

Rated Power Factor (PF) or reactive load (kVAR): \_\_\_\_\_ Leading to \_\_\_\_\_ Lagging

Manufacturer's Power Curve for the \_\_\_\_\_

B. Seller's Estimate of Facility Annual Output Under Ideal (Maximum) or Worst (Minimum) Conditions

Maximum kW Output ("Maximum Facility Delivery Rate"): \_\_\_\_\_ kW AC

Maximum kVA Output: \_\_\_\_\_ kVA

Minimum kW Output: \_\_\_\_\_ kW Estimated kW Output: \_\_\_\_\_ kW AC

Maximum Generator Interconnection Agreement Delivery Rate: \_\_\_\_\_ [specify whether instantaneous or hour-averaged]

Nameplate Capacity Rating: \_\_\_\_\_ kW AC at \_\_\_\_\_ ° C

Station service requirements are described as follows: Estimated station service for tracking, lighting and other auxiliary energy requirements is estimated to be approximately \_\_\_\_\_ kWh annually.

C. PV Panel output degradation factor: \_\_\_\_\_ % per year \_\_\_\_\_

Description of Premises:

**EXHIBIT 6.7.3**

**FORM OF FORECAST**

*Example to be developed prior to the Commercial Operation Date*



**EXHIBIT 6.9.2**

**OTHER REAL TIME DATA**

*Example to be developed prior to the Commercial Operation Date*

**EXHIBIT 6.10.8**

**FORM OF OPERATIONAL REPORT**

*Example to be developed prior to the Commercial Operation Date*

EXHIBIT 6.12

EXAMPLE CALCULATION OF OUTPUT GUARANTY

Annual Expected Energy:

•	0	[REDACTED]	[REDACTED]
•	[REDACTED]	[REDACTED]	[REDACTED]
•	[REDACTED]	[REDACTED]	[REDACTED]
•	[REDACTED]	[REDACTED]	[REDACTED]
•	[REDACTED]	[REDACTED]	[REDACTED]

Annual Quantity of Net Output:

•	[REDACTED]
•	[REDACTED]
•	[REDACTED]
•	[REDACTED]
•	[REDACTED]

Output Guarantee\*:

•	[REDACTED]
•	[REDACTED]
•	[REDACTED]

\* Seller Uncontrollable Minutes in the above examples are assumed to be zero.

Average Net Output: (over two consecutive Contract Years)

•	[REDACTED]
•	[REDACTED]
•	[REDACTED]

[REDACTED]

[REDACTED] cost to Cover during the [REDACTED]

Seller pays Buyer liquidated damages for 'Year #3 & #4' period as follows:

•	[REDACTED]
•	[REDACTED]
•	[REDACTED]

## EXHIBIT 8.4

### FORM OF LENDER CONSENT

This CONSENT AND AGREEMENT (this “Consent”), dated as of \_\_\_\_\_, 2020, is entered into by and among Buyer, a \_\_\_\_\_ (together with its permitted successors and assigns, “Buyer”), \_\_\_\_\_, in its capacity as [**Administrative Agent**] for the Lenders referred to below (together with its successors, designees and assigns in such capacity, “Administrative Agent”), and \_\_\_\_\_, a \_\_\_\_\_ formed and existing under the laws of the State of \_\_\_\_\_ (together with its permitted successors and assigns, “Borrower”). Unless otherwise defined, all capitalized terms have the meaning given in the Contract (as hereinafter defined).

- A. WHEREAS, Borrower intends to develop, construct, install, test, own, operate and use an approximately \_\_\_ MW solar-powered electric generating facility located \_\_\_\_\_, known as the \_\_\_\_\_ Project (the “Facility”).
- B. WHEREAS, In order to partially finance the development, construction, installation, testing, operation and use of the Facility, Borrower has entered into that certain [**Financing Agreement**] dated as of \_\_\_\_\_ (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Financing Agreement”), among Borrower, the financial institutions from time to time parties thereto (collectively, the “Lenders”), and Administrative Agent for the Lenders, pursuant to which, among other things, Lenders have extended commitments to make loans and other financial accommodations to, and for the benefit of, Borrower.
- C. WHEREAS, Borrower anticipates that, prior to the completion of construction of the Facility, it will seek an additional investor (the “Tax Investor”) to make an investment in Borrower to provide additional funds to finance the operation and use of the Facility.
- D. WHEREAS, Buyer and Borrower have entered into that certain Power Purchase Agreement, dated as of \_\_\_\_\_ (collectively with all documents entered into in connection therewith that are listed on [Schedule A] attached hereto and incorporated herein by reference, as all are amended, amended and restated, supplemented or otherwise modified from time to time in accordance with the terms thereof and hereof, the “PPA”).
- E. WHEREAS, pursuant to a security agreement executed by Borrower and Administrative Agent for the Lenders (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”), Borrower has agreed, among other things, to assign, as collateral security for its obligations under the Financing Agreement and related documents (collectively, the “Financing Documents”), all of its right, title and interest in, to and under the

PPA to Administrative Agent for the benefit of itself, the Lenders and each other entity or person providing collateral security under the Financing Documents.

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and intending to be legally bound, the parties hereto hereby agree as follows:

#### SECTION 1. CONSENT TO ASSIGNMENT

Buyer acknowledges the assignment referred to in Recital E above, consents to an assignment of the PPA pursuant thereto, and agrees with Administrative Agent as follows:

(A) Administrative Agent shall be entitled (but not obligated) to exercise all rights and to cure any defaults of Borrower under the PPA, subject to applicable notice and cure periods provided in the PPA. Upon receipt of notice from Administrative Agent, Buyer agrees to accept such exercise and cure by Administrative Agent if timely made by Administrative Agent under the PPA and this Consent. Upon receipt of Administrative Agent's written instructions, Buyer agrees to make directly to Administrative Agent all payments to be made by Buyer to Borrower under the PPA from and after Buyer's receipt of such instructions, and Borrower consents to any such action.

(B) Buyer will not, without the prior written consent of Administrative Agent (such consent not to be unreasonably withheld), (i) cancel or terminate the PPA, or consent to or accept any cancellation, termination or suspension thereof by Borrower, except as provided in the PPA and in accordance with subparagraph 1(C) hereof, or (ii) sell, assign or otherwise dispose (by operation of law or otherwise) of any part of its interest in the PPA, except as provided in the PPA.

(C) Buyer agrees to deliver duplicates or copies of all notices of default delivered by Buyer under or pursuant to the PPA to Administrative Agent in accordance with the notice provisions of this Consent. Buyer may deliver any such notices concurrently with delivery of the notice to Borrower under the PPA. Administrative Agent shall have the same period of time to cure the breach or default that Borrower is entitled to under the PPA if such default is the failure to pay amounts to Buyer which are due and payable by Borrower under the PPA, except that if Buyer does not deliver the default notice to Administrative Agent concurrently with delivery of the notice to Borrower under the PPA, then as to Administrative Agent, the applicable cure period under the PPA shall begin on the date on which the notice is given to Administrative Agent. Buyer consents to the transfer of Borrower's interest under the PPA to the Lenders or Administrative Agent or their designees or assignees or any of them or a purchaser or grantee pursuant to the terms of the Financing Documents upon enforcement of such security at a foreclosure sale by judicial or nonjudicial foreclosure and sale or by a conveyance by Borrower in lieu of foreclosure and agrees that upon such foreclosure, sale or conveyance, Buyer shall recognize the Lenders or Administrative Agent or their designees or assignees or any of them or other purchaser or grantee as the applicable party under the PPA (provided that such Lenders or Administrative Agent or their designees or assignees or purchaser or grantee assume the obligations of Borrower under the PPA, including satisfaction and compliance with all requirements of Article 8 of the PPA, and provided further that Buyer's rights with respect to the Facility are preserved in the event of any such transfer of Borrower's interest under the PPA).

(D) In the event Administrative Agent, the Lenders or their designees or assignees elect to perform Borrower's obligations under the PPA as provided in subparagraph 1(C) above, the recourse of Buyer against Administrative Agent, Lenders or their designees and assignees shall be limited to such parties' interests in the Facility, the credit support required under Article 8 of the PPA, and recourse against the assets of any party or entity that assumes the PPA or that enters into such new contract.

(E) In the event Administrative Agent, the Lenders or their designees or assignees succeed to Borrower's interest under the PPA, Administrative Agent, the Lenders or their designees or assignees shall cure any then-existing payment and performance defaults under the PPA, except any performance defaults of Borrower itself which by their nature are not susceptible of being cured and do not impair Buyer's rights under the PPA. Administrative Agent, the Lenders and their designees or assignees shall have the right to assign all or a pro rata interest in the PPA to a person or entity to whom Borrower's interest in the Facility is transferred, provided such transferee assumes the obligations of Borrower under the PPA. Upon such assignment, Administrative Agent and the Lenders and their designees or assignees (including their agents and employees, but excluding Seller) shall be released from any further liability thereunder accruing from and after the date of such assignment, to the extent of the interest assigned.

**SECTION 2. REPRESENTATIONS AND WARRANTIES** [Buyer shall have the right to qualify the factual information contained in this Section to ensure that such representation is a true statement as of the date of this Consent.]

Buyer, acting in its merchant function capacity (and therefore specifically excluding the knowledge of Buyer, acting in its transmission function capacity ("Buyer Transmission"), as to any of the matters stated below, and without imputation to Buyer of any knowledge whatsoever relating to the Buyer Transmission, whether as a result of information publicly posted to the open access same-time information system or otherwise), hereby represents and warrants that as of the date of this Consent:

(A) It (i) is a corporation duly formed and validly existing under the laws of the state of its organization, (ii) is duly qualified, authorized to do business and in good standing in every jurisdiction necessary to perform its obligations under this Consent, and (iii) has all requisite corporate power and authority to enter into and to perform its obligations hereunder and under the PPA, and to carry out the terms hereof and thereof and the transactions contemplated hereby and thereby; and

(B) the execution, delivery and performance of this Consent and the PPA have been duly authorized by all necessary corporate action on its part and do not require any approvals, material filings with, or consents of any entity or person which have not previously been obtained or made.

**SECTION 3. NOTICES**

All notices required or permitted hereunder shall be in writing and shall be effective (a) upon receipt if hand delivered, (b) upon telephonic verification of receipt if sent by facsimile and (c) if otherwise delivered, upon the earlier of receipt or three (3) Business Days after being sent

registered or certified mail, return receipt requested, with proper postage affixed thereto, or by private courier or delivery service with charges prepaid, and addressed as specified below:

If to Buyer:

[ ]  
[ ]  
[ ]  
Telephone No.: [ ]  
Telecopy No.: [ ]  
Attn: [ ]

If to Administrative Agent:

[ ]  
[ ]  
[ ]  
Telephone No.: [ ]  
Telecopy No.: [ ]  
Attn: [ ]

If to Borrower:

[ ]  
[ ]  
[ ]  
Telephone No.: [ ]  
Telecopy No.: [ ]  
Attn: [ ]

Any party shall have the right to change its address for notice hereunder to any other location within the United States by giving thirty (30) days written notice to the other parties in the manner set forth above. Further, the Tax Investor shall be entitled to receive notices from Buyer by providing written notice to Buyer of Tax Investor's address for notices. Buyer's failure to provide any notice to the Tax Investor shall not be a breach of this Consent.

SECTION 4. ASSIGNMENT, TERMINATION, AMENDMENT AND GOVERNING LAW

This Consent shall be binding upon and benefit the successors and assigns of the parties hereto and the Tax Investor and their respective successors, transferees and assigns (including without limitation, any entity that refinances all or any portion of the obligations under the Financing Agreement). Buyer agrees to confirm such continuing obligation in writing upon the reasonable request of (and at the expense of) Borrower, Administrative Agent, the Lenders or any of their respective successors, transferees or assigns. No termination, amendment, variation or waiver of any provisions of this Consent shall be effective unless in writing and executed by the parties hereto. This Consent shall be governed by the laws of the State of New York (without giving effect to the principles thereof relating to conflicts of law except Section 5-1401 and 5-1402 of the New York General Obligations Law).

#### SECTION 4.1 ASSIGNMENT TO RUS

Notwithstanding any other provision herein, Buyer, without the approval of Seller or Administrative Agent, may assign, transfer, mortgage or pledge the PPA and this Agreement to create a security interest for the benefit of the United States of America (the "Government"), acting through the Administrator of the RUS (the "Administrator"), and its other lenders. Thereafter, the Administrator or such other lenders, without the approval of Seller or Administrative Agent, may (1) cause this Agreement to be sold, assigned, transferred, or otherwise disposed of to a third party pursuant to the remedies with respect to such security interest or in lieu of the exercise of such remedies in connection with a debt settlement, or (2) if the Government first acquires the PPA and this Agreement pursuant to 7 U.S.C § 907, sell, assign, transfer or otherwise dispose of this Agreement to a third party; provided however, that in either case at the time of such initial disposition (a) Buyer is in default of its obligations to the Government or such other lenders that are secured by such security interest and the Administrator or such other lender has given Seller notice of such default; and (b) the Administrator or such other lender has given 30 days' prior notice of its intention to sell, assign, transfer or otherwise dispose of this Agreement indicating the identity of the intended third party assignee or purchaser. No permitted sale, assignment, transfer, mortgage, pledge or other disposition under this Section 4.1 shall release or discharge Buyer from its obligations under the PPA and this Agreement.

#### SECTION 5. COUNTERPARTS

This Consent may be executed in one or more duplicate counterparts, and when executed and delivered by all the parties listed below, shall constitute a single binding agreement.

#### SECTION 6. SEVERABILITY

In case any provision of this Consent, or the obligations of any of the parties hereto, shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions, or the obligations of the other parties hereto, shall not in any way be affected or impaired thereby.

#### SECTION 7. ACKNOWLEDGMENTS BY BORROWER

Borrower, by its execution hereof, acknowledges and agrees that notwithstanding any term to the contrary in the PPA, Buyer may perform as set forth herein and that neither the execution of this Consent, the performance by Buyer of any of the obligations of Buyer hereunder, the exercise of any of the rights of Buyer hereunder, or the acceptance by Buyer of performance of the PPA by any party other than Borrower shall (1) release Borrower from any obligation of Borrower under the PPA, (2) constitute a consent by Buyer to, or impute knowledge to Buyer of, any specific terms or conditions of the Financing Agreement, the Security Agreement or any of the other Financing Documents, or (3) constitute a waiver by Buyer of any of its rights under the PPA. Borrower and Administrative Agent acknowledge hereby for the benefit of Buyer that none of the Financing Agreement, the Security Agreement, the Financing Documents or any other documents executed in connection therewith alter, amend, modify or impair (or purport to alter, amend, modify or impair) any provisions of the PPA. Borrower shall have no rights against Buyer on account of this Consent.



SECTION 8. JURY TRIAL WAIVER

THE PARTIES EACH HEREBY IRREVOCABLY WAIVE ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

[Signature page follows]

IN WITNESS WHEREOF, the parties hereto by their officers thereunto duly authorized, have duly executed this Consent as of the date first set forth above.

Buyer,  
a \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

\_\_\_\_\_,  
a \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

\_\_\_\_\_  
as Administrative Agent for the Lenders

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

## **EXHIBIT 9.2**

### **POINT OF DELIVERY/INTERCONNECTION FACILITIES/METERING SCHEMATIC**

The Facility Metering and Interconnection Schematic is typically completed approximately six months prior to construction. Seller to provide to Buyer when complete based on project schedule.

**EXHIBIT 11.4**

*[note amend to reflect subsequent revisions to final Agreement]*

**FORM OF MEMORANDUM OF POWER PURCHASE AGREEMENT**

WHEN RECORDED, MAIL TO:

BUYER

[address]

Attn: \_\_\_\_\_

**MEMORANDUM OF POWER PURCHASE AGREEMENT**

THIS MEMORANDUM OF POWER PURCHASE AGREEMENT (“Memorandum”), dated as of \_\_\_\_\_, 2020, is made by and between \_\_\_\_\_, a \_\_\_\_\_ limited liability company (“Seller”), and BUYER, a \_\_\_\_\_ (“Buyer”). Seller and Buyer are sometimes hereinafter referred to collectively as the “Parties” and individually as a “Party”.

RECITALS

A. Seller and Buyer have entered into that certain Power Purchase Agreement on the \_\_\_ day of \_\_\_\_\_, 2020 (the “Agreement”), pursuant to which Seller has agreed to construct, own, operate and maintain a solar-powered generation facility for the generation of electric energy to be located in \_\_\_\_\_ (as more particularly defined in the Agreement, the “Facility”), and upon completion of said Facility, to sell to Buyer the electric energy and capacity to be produced by the Facility as well as all associated “RECs” (as that term is defined in the Agreement), all on the terms and conditions set forth in the Agreement. The real property on which the Facility is to be constructed (the “Premises”) is more particularly described in the attached Exhibit “A”.

B. Seller and Buyer desire to provide record notice of certain terms and conditions of the Agreement pertaining to the Parties’ respective rights and obligations under the Agreement in the event the Agreement is terminated due to a default by Seller.

NOW, THEREFORE, in consideration of the mutual covenants and obligations set forth in the Agreement and this Memorandum, Seller and Buyer agree as follows:

TERMS

1. The Premises. Seller acknowledges and agrees that the real property comprising the Premises, and all improvements and fixtures to be constructed thereon, including without limitation, the Facility, is and will be owned by Seller and shall hereafter be held, sold, conveyed, transferred, assigned, subdivided, leased, rented, encumbered, occupied and used subject to and in accordance with the Agreement and this Memorandum.

2. Covenants Running with the Land. The provisions of Section 11.4, 11.9, 20.4, and 20.5 of the Agreement are and shall be deemed to be covenants running with the land and shall be binding upon and inure to the benefit of Seller and Buyer and their respective successors and assigns, including without limitation any person acquiring or owning an interest in the Premises or the Facility, and their respective heirs, executors, successors, assigns, administrators, devisees and representatives.

3. Notice.

a. Termination for Default. If the Agreement is terminated due to a default by Seller, neither Seller nor any Affiliate of Seller, nor any successor to Seller with respect to the ownership of the Facility or Premises (for whom Seller acts herein as agent) may thereafter require or seek to require Buyer to purchase energy or capacity from the Facility or any facility constructed on the Premises under the Public Utility Regulatory Policy Act of 1978, as amended from time to time (“PURPA”), or any other “Requirements of Law” on account of its status as a “QF” or “qualifying facility” (as those terms are defined in the Agreement), for any periods that would have been within the “Term” (as defined in the Agreement), had the Agreement remained in effect. Seller, on behalf of itself and on behalf of any other entity on whose behalf it may act, hereby waives its rights to require Buyer to do so. Seller, pursuant to Section 11.4 of the Agreement, has, on behalf of itself and its successors, waived its rights to require Buyer to so purchase such energy from the Facility in the event of such termination. Terms not defined herein are defined in the Agreement.

b. Survival. The terms and provisions of Section 11.4 of the Agreement shall survive the termination of the Agreement.

4. Effect of Memorandum. This Memorandum, and the rights and obligations of the parties hereunder, are subject to all of the terms and conditions of the Agreement. The Agreement is hereby incorporated by reference as if fully set forth herein.

5. Counterparts. This Memorandum may be executed in any number of counterparts, each of which when executed and delivered shall be deemed an original, and all of which shall together constitute one and the same instrument.

6. Further Information. Further information regarding the specific terms and conditions of the Agreement may be requested from Buyer at [address], Attn: [addressee]. Disclosure of any such information shall be subject to the terms and conditions of a written confidentially agreement acceptable to Buyer in its sole and absolute discretion.

IN WITNESS WHEREOF, Seller and Buyer have executed and acknowledged this Memorandum as of the day and year first above written.

\_\_\_\_\_  
a \_\_\_\_\_ limited liability company

BUYER,  
a \_\_\_\_\_

By \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

By \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
: ss.  
COUNTY OF \_\_\_\_\_ )

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_,  
2020 by \_\_\_\_\_, the \_\_\_\_\_ of \_\_\_\_\_,  
a \_\_\_\_\_ limited liability company.

\_\_\_\_\_  
NOTARY PUBLIC

STATE OF \_\_\_\_\_ )  
: ss.  
COUNTY OF \_\_\_\_\_ )

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_,  
2020, by \_\_\_\_\_, the \_\_\_\_\_  
of BUYER, a \_\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

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Exhibit "A"

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Legal Description of the Premises

## **EXHIBIT 13**

### **REQUIRED INSURANCE**

From and after the delivery of full notice to proceed to the balance of plant contractor for the Facility and during the remainder of the Term of this Agreement:

1. Commercial general liability insurance against claims for personal injury (including bodily injury and death) and property damage with a limit of liability of one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) general aggregate for combined bodily injury and property damage.
2. Excess/Umbrella liability insurance covering claims in excess of the underlying liability insurance described in paragraph 1, with a minimum ten million dollars (\$10,000,000) limit of liability per occurrence. The amounts of liability insurance described in paragraph 1 and this paragraph 2 may be satisfied by primary insurance or by any combination of primary and excess/umbrella insurance.
3. Workers' Compensation insurance to insure statutory liability for injury to Seller's employees in accordance with the Requirements of Law.



**FIRST AMENDMENT TO  
POWER PURCHASE AGREEMENT  
(RENEWABLE ENERGY-SOLAR)**

This First Amendment to Power Purchase Agreement (Renewable Energy-Solar) (this “**Amendment**”) by and between Unbridled Solar, LLC, a Delaware limited liability company formerly known as Henderson Solar, LLC (“**Seller**”), and Big Rivers Electric Corporation, a Kentucky rural electric cooperative corporation (“**Buyer**”), is entered into and made effective as of September 7<sup>th</sup>, 2022 (the “**Amendment Effective Date**”). Buyer and Seller are sometimes referred to herein collectively as the “**Parties**,” and each as a “**Party**.”

**RECITALS**

WHEREAS, the Parties entered into that certain Power Purchase Agreement (Renewable Energy-Solar), dated May 26, 2020 (the “**PPA**”); and

WHEREAS, pursuant to Section 21 of the PPA, any modification of the PPA shall be in writing and executed by the Parties.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree, intending to be legally bound, to amend the PPA as follows:

**AGREEMENT**

1. **Defined Terms.** Capitalized terms not otherwise defined in this Amendment shall have the meanings set forth in the PPA, as amended.

2. **Amendments.** The PPA is hereby amended as follows:

(a) In the second “**WHEREAS**” clause in the recitals to the PPA, the reference to [REDACTED] is deleted and replaced with [REDACTED]

(b) The following amendments are made to Section 1.1 of the PPA:

(i) A new definition of “**Amendment Approval Date**” is added in the appropriate alphabetical location in Section 1.1 of the PPA and reads as follows:

“**Amendment Approval Date**” means the date upon which Seller has received written notice from Buyer that both the Kentucky Public Service Commission and the Rural Utilities Service have approved the First Amendment.

(ii) In the first sentence of the definition of “**Commercial Operation**” the words “**ninety percent (90%) of**” are added immediately following the words “**not less than**”.

(iii) In the definition of “**Delay Damages**” the reference to [REDACTED] is

deleted and replaced with [REDACTED]

(iv) The definition of “Expected Energy” is deleted in its entirety and replaced with the following:

“Expected Energy” means [REDACTED] of Net Output during the first Contract Year, measured at the Point of Delivery; [REDACTED] of Net Output during the second Contract Year, measured at the Point of Delivery; and thereafter, Expected Energy will be the annual generation predicted by the Solar Performance Modeling Program for the Facility as constructed, *multiplied by* the measured plane of array irradiance derived from the same satellite data source used in the Solar Performance Modeling Program, *divided by* the Solar Performance Modeling Program's expected plane of array irradiance, taking into account an annual degradation factor of 0.5% per Contract Year. Seller estimates that the Net Output will be delivered during each calendar year according to the estimates of monthly output set forth in Exhibit A. Seller acknowledges that Buyer will include Buyer's Interest in Buyer's resource planning. Buyer acknowledges that solar exposure is a variable resource and that the Facility's actual annual output of Net Output and RECs in the ordinary course of any given Contract Year will be subject to variation caused by differences in the solar exposure at the Facility from Contract Year to Contract Year; provided, however, that nothing in this sentence affects or reduces Seller's obligations hereunder.

(v) A new definition of “First Amendment” is added in the appropriate alphabetical location in Section 1.1 of the PPA and reads as follows:

“First Amendment” means that certain First Amendment to this Agreement between the Parties dated August 29, 2022.

(vi) A new definition of “Interconnection Provider Delay” is added in the appropriate alphabetical location in Section 1.1 of the PPA and reads as follows:

“Interconnection Provider Delay” means, in the event Interconnection Provider has not provided backfeed power to the Facility in connection with the interconnection of the Facility to the System, through no fault of Seller, on or before [REDACTED] a period of days equal the sum of (a) the day-for-day period thereafter until the date Interconnection Provider provides such backfeed power to the Facility and (b) seven (7) days. For example, if the Interconnection Provider provides such backfeed power on [REDACTED] then the Scheduled Commercial Operation Date of [REDACTED] would be extended by seventeen (17) days.

(vii) The definition of “Network Upgrade Costs” is deleted in its entirety and replaced with the following:

“Network Upgrade Costs” means all costs and expenses for Network Upgrades (as such term is defined in the Tariff) and also includes

costs and expenses payable to any Affected System Operator and defined in and required under the Generation Interconnection Agreement and/or Provisional Generator Interconnection Agreement.

(viii) A new definition of “**Provisional Generator Interconnection Agreement**” is added in the appropriate alphabetical location in Section 1.1 of the PPA and reads as follows:

“**Provisional Generator Interconnection Agreement**” is defined in Attachment X to the Tariff and includes any similar provisional or conditional Generation Interconnection Agreement pursuant to which the Transmission Provider provides Provisional Interconnection Service (as defined in Attachment X to the Tariff) or similar service to the Facility.

(ix) A new definition of “**Provisional Interconnection Study**” is added in the appropriate alphabetical location in Section 1.1 of the PPA and reads as follows:

“**Provisional Interconnection Study**” is defined in Attachment X to the Tariff.

(x) A new definition of “**Regulatory Approval Delay**” is added in the appropriate alphabetical location in Section 1.1 of the PPA and reads as follows:

“**Regulatory Approval Delay**” means, in the event the Kentucky Public Service Commission and the Rural Utilities Service have not approved the First Amendment on or before October 1, 2022, a day-for-day period equal to the period commencing on and including October 1, 2022 and ending on the Amendment Approval Date.

(xi) The definition of “**Scheduled Commercial Operation Date**” is deleted in its entirety and replaced with the following:

“**Scheduled Commercial Operation Date**” means [REDACTED], which date shall be subject to extension for each event of Interconnection Provider Delay and/or Regulatory Approval Delay (if applicable).

(c) A new Section 4.4.3 is added to the PPA and reads as follows:

4.4.3 Potential Provisional GIA Curtailment. In the event the Net Output of the Facility is curtailed pursuant to limitations or restrictions imposed pursuant to or in connection with the Provisional Generator Interconnection Agreement (including in connection with any quarterly operating limits imposed upon the Facility), then Seller shall notify Buyer of such limitations or restrictions and Buyer will use commercially reasonable efforts to assist Seller’s commercially reasonable efforts to mitigate or reduce any adverse effects of such limitations or restrictions to both parties, including by providing Seller and the Facility with access to any surplus interconnection service (or similar service) that is or is reasonably expected

to be available at or in connection with any power or energy plants owned by Buyer or its Affiliates.

(d) Section 5.2.2 of the PPA is deleted in its entirety and replaced with the following:

5.2.2 Network Upgrades.

(a) Notwithstanding anything to the contrary in this PPA:

(i) the Generation Interconnection Agreement may be a Provisional Generator Interconnection Agreement, at Buyer's sole option, which may limit the operations of the Facility and the delivery of Net Output therefrom, and may require Network Upgrade Costs to interconnect the Facility to the System to allow the Facility to operate and deliver Net Output to the Point of Delivery at the Expected Nameplate Capacity Rating;

(ii) excepting the Interconnection Facilities of the Facility (which shall remain the responsibility of Seller and Seller shall be responsible for the costs and expenses thereof), in the event Buyer has not timely exercised its rights to terminate this Agreement pursuant to Section 5.2.2(b) below, Buyer shall be responsible for the payment of, and pay for (or, to the extent paid or incurred by Seller or its Affiliates, reimburse Seller for), all Network Upgrade Costs required in connection with the Facility's interconnection to the System at the Expected Nameplate Capacity Rating; and

(iii) except as otherwise expressly set forth herein, Seller shall be responsible for legal and ministerial costs in obtaining the permanent Generation Interconnection Agreement; provided, however, that if additional Network Upgrade Costs are included in or imposed pursuant to the permanent Generation Interconnection Agreement, then Buyer shall be responsible for and shall pay such costs as described above.

(b) Provided this Agreement has not been earlier terminated, Seller shall pay for the Network Upgrade Costs pursuant to the terms and conditions of the Provisional Generator Interconnection Agreement and Buyer agrees to reimburse Seller for such amount of Network Upgrade Costs no later than ten (10) Business Days following receipt of notice and reasonable evidence from Seller of Seller's payment thereof and receipt by Buyer of Seller's invoice for the applicable costs. The Parties acknowledge and agree that (i) Seller will be responsible for providing security required under Attachment X of the Tariff to proceed with the Facility's interconnection process thereunder, (ii) that such security may be used by the Transmission Provider to pay for such Network Upgrade Costs, and (iii)

the use by Transmission Provider of such security to pay for such Network Upgrade Costs shall not affect Buyer's obligation to, and Buyer shall, reimburse Seller for such amounts.

(c) In the event the Network Upgrade Costs reflected in the Provisional Interconnection Study are in excess of \$10,000,000, then Buyer shall deposit an amount equal to such amount of Network Upgrade Costs into an escrow account with a state- or federally-chartered commercial bank with net assets of at least \$1 billion. Such escrow account shall be governed by an escrow agreement in form mutually satisfactory to Seller, Buyer and the escrow agent (each acting reasonably), provided that (i) Seller shall hold a first and exclusive perfected security interest in the funds in such escrow account, (ii) Seller shall be permitted unilaterally to draw down any amount therein in the event Buyer fails to timely reimburse Seller as described in Section 5.2.2(b) regardless of any protest by Buyer or any other party liable thereon (provided that nothing in the escrow agreement shall preclude any protest against Seller by Buyer, following any draw, that such draw did not comply with this Agreement), and (iii) Buyer shall pay all fees and expenses of the escrow agent. All investment income on such escrow account shall be taxable to, and accrue for the benefit of, Buyer.

(e) Seller shall be entitled to seek and obtain a decree compelling specific performance or granting injunctive relief with respect to, and shall be entitled, to enjoin any actual or threatened breach of any material obligation of Buyer under this Section 5.2.2. The Parties agree that specific performance (including temporary and preliminary relief) and injunctive relief are proper in the event of any actual or threatened breach of any material obligation, and that any liability limits contained herein shall not operate to limit the exercise of Seller's remedies in equity to cause Buyer to perform its obligations under this Section 5.2.2.

(e) In Section 6.3 of the PPA, each of the references to "Section 5.2.2" are deleted and replaced with "Sections 4.4.3 and 5.2.2."

(f) In Section 8.1 of the PPA, clause (i) thereof is deleted in its entirety and replaced with the following: "(i) for the period commencing thirty (30) days following the Amendment Approval Date and ending on the Commercial Operation Date, [REDACTED] and".

(g) Section 12.1.7 of the PPA is deleted in its entirety and replaced with the following:

**12.1.7 Consequential Damages.** EXCEPT AS OTHERWISE PROVIDED FOR IN THIS AGREEMENT, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR SPECIAL, PUNITIVE, INDIRECT, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER SUCH DAMAGES ARE ALLOWED OR PROVIDED BY

CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, STATUTE OR OTHERWISE. THE PARTIES AGREE THAT ANY LIQUIDATED DAMAGES, DELAY DAMAGES, BUYER AND SELLER COST TO COVER DAMAGES, SECTION 11.2.3 CAPACITY RIGHTS LOSS DAMAGES, INDEMNIFICATION FOR THIRD PARTY DAMAGES, OR OTHER SPECIFIED MEASURE OF DAMAGES EXPRESSLY PROVIDED FOR HEREIN, ARE NOT INTENDED BY THEM TO REPRESENT SPECIAL, PUNITIVE, INDIRECT, EXEMPLARY OR CONSEQUENTIAL DAMAGES.

(h) In Section 22.1 of the PPA, the reference to “Henderson Solar, LLC” is deleted and replaced with “Unbridled Solar, LLC.”

(i) Exhibit A to the PPA is deleted and replaced with the Exhibit A to this Amendment.

(j) In Exhibit B to the PPA, the reference to “[REDACTED]” is deleted and replaced with “[REDACTED]” and each reference to “[REDACTED]” is replaced with “[REDACTED]”.

(k) Exhibit 5.1 to the PPA is deleted and replaced with Exhibit 5.1 to this Amendment.

3. PSC Approval. This Amendment shall become effective upon the Amendment Approval Date; provided, that Buyer shall use its commercially reasonable efforts to file this Amendment with Kentucky Public Service Commission and the Rural Utilities Service as soon as reasonably practicable following the Amendment Effective Date and to achieve the Amendment Approval Date as soon as reasonably practicable thereafter.

4. Replacement of Credit Support. Buyer agrees that, in the event Seller desires to replace (rather than increase via a supplemental instrument) the current Credit Support in place under the PPA with the Credit Support required pursuant to this Amendment, Buyer shall concurrently return such current Credit Support to Seller without offset or deduction at the time Seller provides such replacement Credit Support.

5. Limited Effect and Binding Agreement. Except as specified in this Amendment, all terms and conditions of the PPA shall continue in full force and effect. Following the date of the PPA, Seller underwent a change in its name from “Henderson Solar, LLC” to “Unbridled Solar, LLC” and Seller acknowledges and agrees that it is responsible for all of Seller’s liabilities and obligations under the PPA, as amended, as a party thereto.

6. Entire Agreement. This Amendment, the PPA and the other documents related thereto, including all schedules and exhibits thereto, constitute the entire agreement of the Parties with respect to the subject matter hereof and thereof, and supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding the subject matter hereof. This Amendment may not be modified, amended or terminated except by a written instrument specifically referring to this Amendment or the PPA signed by all the Parties hereto or thereto, as the case may be.

7. Headings. Captions and headings used in this Amendment are for ease of reference only and do not constitute a part of this Amendment.

8. Governing Law. This Amendment shall be interpreted and enforced in accordance with the laws of the Commonwealth of Kentucky, excluding any choice of law rules that may direct the application of the laws of another jurisdiction.

9. Partial Invalidity. The Parties do not intend to violate any laws governing the subject matter hereof. If any of the terms hereof are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms hereof shall remain in effect. The Parties shall use best efforts to amend this Amendment to reform or replace any terms determined to be invalid, illegal or void, such that the amended terms (a) comply with and are enforceable under applicable law, (b) give effect to the intent of the Parties in entering hereinto, and (c) preserve the balance of the economics and equities contemplated by this Amendment in all material respects.

10. Counterparts. This Amendment may be executed in several counterparts, each of which is an original and all of which constitute one and the same instrument.


11. Imaged Agreement: Electronic Signatures. Any original executed copy of this Amendment or any other related document may be electronically copied or photocopied and stored electronically (“Imaged Agreement”). If an Imaged Agreement is introduced as evidence in any judicial, arbitration, mediation or administrative proceedings, neither Party shall object to the admissibility of the Imaged Agreement on the basis that such was not originated or maintained in documentary form under the hearsay rule, the best evidence rule or other rule of evidence. Without limiting the foregoing, electronic signatures (including documents executed and delivered through DocuSign or similar third party electronic signature capture service providers) shall be deemed original signatures for purposes of this Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures. The Parties agree that this Amendment, any addendum or amendment hereto or any other document necessary for the consummation of the transactions contemplated by this Amendment may be accepted, executed or agreed to through the use of an electronic signature in accordance with the Electronic Signatures in Global and National Commerce Act, Title 15, United States Code, Sections 7001 et seq., the Uniform Electronic Transaction Act, and any applicable state Law. Any document accepted, executed or agreed to in conformity with such laws will be binding on the Parties the same as if it were physically executed and delivered.

**[SIGNATURE PAGES FOLLOW]**

IN WITNESS WHEREOF, the Parties have executed this Amendment as of the Amendment Effective Date.


**Seller:**

UNBRIDLED SOLAR, LLC

By:   
Name: Blake Nixon  
Its: Authorized Signer

**Buyer:**

BIG RIVERS ELECTRIC CORPORATION

By:   
Name: Robert W. Berry  
Its: President + CEO



## **EXHIBIT A**

### **ESTIMATED OUTPUT**

Seller to provide one (1) electronic and hard copy of the solar plant performance estimation report using PVSYST or a comparable solar performance modeling program including, at a minimum, estimated hourly MW generation output in MWh/h for the Facility. Upon Commercial Operations, Seller shall provide an updated **Exhibit A** based on completed construction and Seller's designated Licensed Professional Engineer will provide certification as part of Commercial Operations that the estimated energy output included in such updated **Exhibit A** is correct as calculated using PVSYST or comparable solar performance modeling program.



All amounts are based on an estimate of the first full Contract Year, which shall be reduced by an annual degradation factor of 0.5% per Contract Year.

**EXHIBIT 5.1**

**CONTRACT PRICE**

The Contract Price is \$38.10 / MWh throughout the Term.



**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

*In the Matter of:*

<b>ELECTRONIC APPLICATION OF</b>	)	
<b>BIG RIVERS ELECTRIC CORPORATION</b>	)	<b>Case No.</b>
<b>FOR APPROVAL OF AMENDMENT TO</b>	)	<b>2022-00296</b>
<b>POWER PURCHASE AGREEMENT</b>	)	

**DIRECT TESTIMONY**

**OF**

**MARK EACRET  
VICE PRESIDENT ENERGY SERVICES**

**ON BEHALF OF**

**BIG RIVERS ELECTRIC CORPORATION**

**FILED: September 22, 2022**

**DIRECT TESTIMONY  
OF  
MARK EACRET**

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**DIRECT TESTIMONY**  
**OF**  
**MARK EACRET**

**I. INTRODUCTION**

**Q. Please state your name, business address, and position.**

A. My name is Mark J. Eacret. I am employed by Big Rivers Electric Corporation (“*Big Rivers*” or the “*Company*”), 201 Third Street, Henderson, Kentucky 42420, as Vice President Energy Services. I report to Robert W. Berry, President and Chief Executive Officer.

**Q. Please describe your job responsibilities.**

A. As Vice President Energy Services, I am responsible for long-term energy and capacity marketing and short-term energy hedging activities at Big Rivers. I am also responsible for coordination of daily Midcontinent Independent System Operator, Inc. (“*MISO*”) commercial market activities that include unit offer strategy, interface with ACES Power Marketing, and oversight of the market awards process. A staff of six professionals report to me. Other responsibilities include scheduling Southeast Power Administration (“*SEPA*”) energy and capacity, the Company’s tri-annual

1 Integrated Resource Plan, contract management, interface with the MISO  
2 Independent Market Monitor, and performing a variety of official roles  
3 within the MISO structure.

4  
5 **Q. Briefly describe your education and work experience.**

6 A. I graduated from Indiana University–Purdue University in Indianapolis  
7 with a Bachelor of Science in Accounting and from Indiana University with  
8 a Master of Business Administration with a concentration in Finance. I  
9 was employed by CINergy and its predecessor companies from 1980 to 1991  
10 in the accounting function and, beginning in 1991, in the wholesale power  
11 function managing the analytical support for the company's wholesale  
12 marketing and trading functions. From 1999 through 2013, I worked with  
13 Ameren Corp where initially my team and I provided analytical support to  
14 the company's marketing and trading functions. In 2007, I assumed the  
15 additional responsibility of Controller for Ameren's merchant generation  
16 operation, Ameren Energy Resources (“AER”). In 2011, I became AER’s  
17 Controller and Vice President of Business Services. Following Ameren’s  
18 2013 sale of its merchant generation function, I moved to Sunflower  
19 Electric Power Corporation (“Sunflower”) in January 2014, as the Senior  
20 Manager of Market Operations and Power Contracts. At Sunflower, I was  
21 part of the team that transitioned Sunflower into the Southwest Power

1 Pool's ("SPP") Integrated Market. I assumed my current position with Big  
2 Rivers in April 2015.

3 **Q. Have you previously testified before this Commission?**

4 A. Yes. I recently testified on behalf of Big Rivers in Case No. 2019-00269<sup>1</sup>  
5 and Case No. 2020-00299.<sup>2</sup> I have also offered direct testimony in Fuel  
6 Adjustment Clause reviews, including Case No. 2019-00007;<sup>3</sup> in Case No.  
7 2021-00079;<sup>4</sup> and Case No. 2020-00183.<sup>5</sup> Additionally, I sponsored  
8 responses to information requests in Case No. 2021-00282;<sup>6</sup> Case No. 2020-

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<sup>1</sup> *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Enforcement of Rate and Service Standards*, P.S.C. Case No. 2019-00269.

<sup>2</sup> *In the Matter of: 2020 Integrated Resource Plan of Big Rivers Electric Corporation*, Case No. 2020-00299.

<sup>3</sup> *In the Matter of: Electronic Examination of the Application of the Fuel Adjustment Clause of Big Rivers Electric Corporation from November 1, 2106 through October 31, 2018*, P.S.C. Case No. 2019-0007.

<sup>4</sup> *In the Matter of: Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity Authorizing the Conversion of the Green Station Units to Natural Gas-Fired Units and an Order Approving the Establishment of a Regulatory Asset*, P.S.C. Case No. 2021-00079.

<sup>5</sup> *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval of Solar Power Contracts*, P.S.C. Case No. 2018-00183.

<sup>6</sup> *In the Matter of: Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis for Deviation from the Commission's September 24, 1990 Order in Administrative Case No. 327*, P.S.C. Case No. 2021-00282.

1 0029;<sup>7</sup> Case No. 2020-00064;<sup>8</sup> Case No. 2019-00365;<sup>9</sup> Case No. 2017-  
2 00384;<sup>10</sup> and Case No. 2016-00278.<sup>11</sup> My professional experience is  
3 summarized in Exhibit Eacret-1.

4  
5 **Q. What is the purpose of your testimony in this proceeding?**

6 A. The purpose of my testimony is to describe the original Power Purchase  
7 Agreement (“PPA” or “Unbridled PPA”) between Big Rivers and Unbridled  
8 Solar, LLC<sup>12</sup> (“Unbridled Solar”), formerly Henderson Solar, LLC, entered  
9 on May 26, 2020 as well as the proposed amendment to the PPA  
10 (“Amendment No. 1”). I also explain the circumstances that have triggered  
11 Big Rivers’ negotiations of Amendment No. 1. Finally, I provide Big Rivers’  
12 economic analysis of the benefits of the amended Unbridled PPA to Big

---

<sup>7</sup> *In the Matter of: Electronic 2020 Integrated Resource Plan of Big Rivers Electric Corporation*, P.S.C. Case No. 2020-00299.

<sup>8</sup> *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval to Modify Its MRSM Tariff, Cease Deferring Depreciation Expenses, Establish Regulatory Assets, Amortize Regulatory Assets, and Other Appropriate Relief*, P.S.C. Case No. 2020-00064.

<sup>9</sup> *In the Matter of: Joint Application of Big Rivers Electric Corporation and Meade County Rural Electric Cooperative Corporation for Approval of Contracts for Electric Service with Nucor Corporation and Application of Big Rivers Electric Corporation for Approval of Tariff*, P.S.C. Case No. 2019-000365.

<sup>10</sup> *In the Matter of: 2017 Integrated Resource Plan of Big Rivers Electric Corporation*, P.S.C. Case No. 2017-00384.

<sup>11</sup> *In the Matter of: Application of Big Rivers Electric Corporation for a Declaratory Order*, P.S.C. Case No. 2016-00278.

<sup>12</sup> As discussed below, Unbridled Solar is a subsidiary of National Grid Renewables (“NGR”).



1 Rivers and its Members and compare those benefits to those of the original  
2 PPA.

3

4 **Q. Will you be sponsoring any exhibits?**

5 A. Yes. I am sponsoring the following exhibits:

6	Exhibit Eacret-1:	Professional Summary
7	Exhibit Eacret-2:	S&P Credit Rating Summary (July 28, 2022)
8	Exhibit Eacret-3:	Fitch Credit Rating Action (Aug. 15, 2022)
9	Exhibit Eacret-4	NGR Presentation (June 1, 2022)
10	Exhibit Eacret-5	SEIA Summary of Survey Results (April 2022)
11	Exhibit Eacret-6	June 18, 2020, Value of Original Three PPA's <sup>13</sup>
12	Exhibit Eacret-7	September 13, 2022 Value of the Amended
13		PPA <sup>14</sup>
14	Exhibit Eacret-8	Reconciliation of 6/18/2020 Value of Original
15		PPA and 9/13/2022 Value of the Amended PPA

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<sup>13</sup> See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval of Solar Power Contracts*, P.S.C. Case No. 2018-00183, Application at Exhibit Eacret-15 (June 24, 2022).

<sup>14</sup> The value calculated in Exhibit Eacret-7 uses the amended contract price, which was increased from \$29.60 to \$38.10/MWh; the amended generation figures, which were reduced to reflect the use of less efficient panels; updated projected energy market conditions; updated projected capacity market conditions, including basing the capacity value of the facility on its Effective Load Carrying Capacity (ELCC); updated projected Renewable Energy Certificate market assumptions; and an increase in Big Rivers' estimated obligation for Network Upgrade Costs.

1

2

3 **II. OVERVIEW**

4

5 **Q. Briefly describe the solar power purchase agreement with National**  
6 **Grid Renewables.**

7 A. In May of 2020, Big Rivers entered into a power purchase agreement with  
8 Unbridled Solar a subsidiary of National Grid Renewables (the “PPA” or  
9 the “contract”).<sup>16</sup> Under the PPA, Big Rivers would receive all of the  
10 capacity, energy, ancillary services, and environmental attributes of a 160  
11 MW solar facility (“Unbridled Project”) to be located on the Henderson  
12 /Webster County line just south of Henderson, Kentucky for a total price of  
13 \$29.60/MWh that would be fixed for twenty years. The development’s  
14 projected commercial operation date was [REDACTED] NGR is  
15 responsible for all costs of connecting the project to the transmission grid  
16 (“Interconnection Cost”). Additional costs of integrating the project onto the  
17 grid (“Network Upgrade Costs”) would be split between NGR and Big

---

<sup>15</sup> The value calculated in Exhibit Eacret-8 includes the original contract terms with updated projected energy and capacity market conditions, and represents an updated projected value of the original PPA.

<sup>16</sup> See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval of Solar Power Contracts*, P.S.C. Case No. 2018-00183.

1 Rivers up to a total of ten million dollars. Big Rivers would be responsible  
2 for cost above \$10 million, with a right to terminate the contract if the costs  
3 became prohibitive.

4  
5 **Q. What benefits does the project bring to Big Rivers Members?**

6 A. As noted in my testimony in Case No. 2020-00183, we found that the  
7 market value of the capacity, energy, ancillary services, and environmental  
8 attributes was more than the fixed PPA price, creating economic value for  
9 our Members. Additionally, a solar PPA was included in the structuring of  
10 the proposal to deliver electric service to Nucor Corporation (“*Nucor*”).<sup>17</sup>  
11 Furthermore, economic development candidates considering locating in the  
12 Big Rivers footprint are asking more and more about our generation  
13 resource mix and decarbonization efforts. Lastly, credit rating agencies are  
14 putting increased emphasis on Environmental, Social, and Governance  
15 (“*ESG*”) criteria, which place a value on moving from coal to renewable  
16 generation.

17

---

<sup>17</sup> See *In the Matter of: Electronic Application of Big Rivers Electric Corporation of Big Rivers Electric Corporation and Meade County Rural Electric Cooperative Corporation for (1) Approval of Contracts for Electric Service with Nucor Corporation; and (2) Approval of Tariff*, Case No. 2019-00365.

1 **Q. How was solar power incorporated into the structure of the Nucor**  
2 **Corporation pricing?**

3 A. Under the PPA between Big Rivers and Nucor, Big Rivers serves Nucor at  
4 a fixed price for ten years, beginning in 2022. That fixed price was  
5 predicated upon a low-priced solar resource, and the Unbridled PPA serves  
6 as a partial hedge of the cost of the capacity and energy required to serve  
7 Nucor over that ten-year period. [REDACTED]

8 [REDACTED]  
9 [REDACTED] A solar PPA is integral  
10 to that portion of the contract structure [REDACTED].

11

12 **Q. How has Big Rivers' incorporation of solar projects into its**  
13 **resource mix been received by the credit rating agencies?**

14 A. There are several reasons why all three credit rating agencies have  
15 upgraded Big Rivers to investment grade over the past several years.  
16 Among those reasons is that, in upgrades announced this year, both  
17 Standard and Poors ("S&P") and Fitch praised Big Rivers' efforts to  
18 diversify its resource mix. Copies of these announcements are attached  
19 hereto as Exhibits Eacret-2 and Eacret-3, respectively.

20

21

1 **Q. Given these benefits, why is Big Rivers seeking to amend the PPA?**

2 A. The PPA was executed on May 26, 2020. NGR applied for a MISO  
3 Generation Interconnection Agreement (“GIA”) on June 25, 2020. The  
4 project was approved by the Kentucky State Board on Electric Generation  
5 and Transmission Siting (“Siting Board”) on June 4, 2021<sup>18</sup> and  
6 subsequently received local approvals. Everything seemed in order.

7 However, on April 11, 2022, representatives of NGR met with Big  
8 Rivers and provided informal notice that NGR would not honor the terms of  
9 the PPA. NGR asserted that it would not be able to finance the project  
10 without “mutually beneficial revisions” to the contract. Without these  
11 revisions, NGR would simply abandon the project and surrender the eight  
12 million dollars in credit support that it had provided.

13  
14 **Q. What reasons did NGR provide for its refusal to honor the**  
15 **contract?**

16 A. On June 1, 2022, a more formal meeting was held between representatives  
17 of NGR and Big Rivers. A copy of NGR’s confidential PowerPoint  
18 presentation is attached hereto as Exhibit Eacret-4. On pages nine (9) and

---

<sup>18</sup> *In the Matter of: Electronic Application of Unbridled Solar, LLC for a Certificate of Construction for an Approximately 160 Megawatt Merchant Electric Solar Generating Facility and Nonregulated Electric Transmission Line in Henderson and Webster Counties, Kentucky, Case No. 2020-00242.*

1 eleven (11) of the presentation, NGR cites four primary drivers of the  
2 financial difficulties facing the Unbridled Project:

- 3 1. Delays in in the MISO GIA Queue;
- 4 2. Supply chain issues driven by COVID restrictions and the war  
5 in Ukraine;
- 6 3. Inflation; and
- 7 4. Anti-dumping & Countervailing Duties pertaining to solar  
8 panels.

9  
10 **Q. Is there any evidence that the NGR contentions are valid?**

11 A. MISO processing of the generator interconnection queue is delayed. As  
12 noted in the NGR presentation (Exhibit Eacret-4 at page 9), the original  
13 Definitive Planning Phase (“DPP”) report from MISO on 2020 projects was  
14 due March 31, 2021. At the time of the presentation (June 1, 2022), it had  
15 been delayed until July 1, 2022. As of the date of this filing, it has been  
16 further delayed until October 7, 2022. Continuous delays in the results of  
17 these MISO studies make it difficult for developers to contract and  
18 schedule construction.

19 Big Rivers met with MISO on February 11, 2022, to discuss the  
20 interconnection queue delays. MISO acknowledged the issue, but provided  
21 little comfort that a solution was imminent. Alternatives, such as

1 Provisional Generator Interconnection Agreements (“PGIA”) and behind-  
2 the-meter approaches were discussed.

3 The supply chain issues and inflation are linked somewhat. The  
4 inability to import goods and materials has been one factor pushing up the  
5 cost of items, if they were available at all. U.S. Department of Labor data  
6 indicates that the US annual inflation rate in 2020 (when the PPA was  
7 signed) was 1.4%. The rate rose to 7.0% in 2021 and the annualized rate as  
8 of July for 2022 is 8.5%.<sup>19</sup>

9 On February 8, 2022, Auxin Solar, Inc. filed a petition requesting  
10 that the US Department of Commerce (“DOC”) initiate a circumvention  
11 investigation into whether importers of crystalline silicon photovoltaic cells  
12 (“CSPs”) from Cambodia, Malaysia, Thailand, or Vietnam were  
13 circumventing antidumping and countervailing duty orders from China.<sup>20</sup>  
14 On March 25, 2022, the DOC initiated such an investigation. If the DOC’s  
15 determines circumvention occurred, retroactive tariffs could be imposed on  
16 subject CSP importers, and the tariffs contemplated under Auxin Solar’s  
17 petition ranged from 19% and 525%.<sup>21</sup>

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<sup>19</sup> See <https://www.usinflationcalculator.com/inflation/current-inflation-rates/>.

<sup>20</sup> See “An Analysis of the Auxin Petition and Commerce Investigation” *The National Law Review*, vol. XII, no. 89, March 30, 2022, available at <https://www.natlawreview.com/article/analysis-auxin-petition-and-commerce-investigation-and-their-impact-solar-industry>.

<sup>21</sup> *Id.*

1           This essentially shut down solar development in the U.S. A survey  
2 of solar energy and energy storage companies by the Solar Energy  
3 Industries Association (“SEIA”) in April of 2022 found that 80% of  
4 respondents reported at least half of their 2022 project pipeline was at risk  
5 with an even larger risk to the 2023 pipeline. See Exhibit Eacret-5, a copy  
6 of SEIA’s presentation of the survey results, at slide no. 13.<sup>22</sup>

7           On June 6, 2022, President Biden issued an executive order intended  
8 to address the Auxin issue by waiving tariffs on solar panels from four  
9 southeast Asian countries for two years. It has had little effect.

10           While these issues are real, protection from such issues is why Big  
11 Rivers entered into a twenty-year fixed-price contract.

12  
13 **Q. Are these issues unique to NGR, Big Rivers, or the Unbridled PPA?**

14 **A.** No. Big Rivers is a member owner of the National Renewables Cooperative  
15 Organization (“NRCO”), along with 23 other Generation and Transmission  
16 cooperatives across the country.<sup>23</sup> Anecdotally within this group, Big  
17 Rivers has heard from several other cooperatives facing similar issues with  
18 solar contracts executed in the 2019-2021 time period.

---

<sup>22</sup> [https://www.seia.org/sites/default/files/2022-04/FINAL%20Auxin%20Impact%20Analysis%202022-04-26\\_0.pdf](https://www.seia.org/sites/default/files/2022-04/FINAL%20Auxin%20Impact%20Analysis%202022-04-26_0.pdf) .

<sup>23</sup> See <https://nrco.coop/> .



1

2 **Q. Did NGR provide any alternatives?**

3 A. On page fifteen (15) of the presentation from June 1, (Exhibit Eacret-4),

4 NGR made six separate pricing proposals. The twenty-year fixed-price

5 proposals, with no other revisions to the contract, [REDACTED]

6 [REDACTED]. The

7 original PPA price was \$29.60/MWh. Again in this meeting, NGR noted

8 that if agreement could not be reached, an alternative open to them was to

9 simply surrender the \$8 million in credit support.

10

11 **III. THE PROPOSED AMENDMENT**

12

13 **Q. Does the amended price address all of the issues raised by NGR?**

14 A. No, there are additional proposed amendments. Increasing the contract

15 price addresses inflation and part of the supply chain issues.

16 To address the problem of delays in the MISO interconnection queue,

17 NGR and Big Rivers have agreed to apply for a provisional generator

18 interconnection (“PGIA”). A PGIA would allow development of the project

19 to begin almost immediately. This essentially circumvents the standard

20 GIA interconnection process, but comes with risks as discussed below. Big

1 Rivers has also agreed to delay the Commercial Operation Date [REDACTED]

3 To address the potential tariff issue, NGR plans to use panels from a  
4 domestic developer. While these panels don't bear the tariff risk of  
5 imported panels, they are not as efficient as those originally planned for  
6 the development. Therefore, due to the projected energy generation drops,  
7 Amendment No. 1 reduces the guaranteed net output.

8  
9 **Q. Describe a Provisional Generation Interconnection.**

10 A. Section 6.2.9 of the MISO Generator Interconnection Business Practices  
11 Manual ("*BPM-015*") defines the PGIA process.<sup>24</sup> As the BPM describes, a  
12 PGIA can be requested at limited times contingent on the MISO schedule.  
13 Due to the MISO schedule, delays and the current position of the Unbridled  
14 Project within the GIA process, the NGR solar project is eligible for PGIA  
15 consideration. Under the PGIA process, the applicant accepts the risks of  
16 Network Upgrade Costs with a limited ability to cancel the project. In  
17 return for a \$.90/MWh reduction in the PPA price (from \$39.00/MWh to  
18 \$38.10/MWh), Big Rivers has agreed to accept all of the Network Upgrade  
19 Cost risk. Based on historic operating experiences of the network

---

<sup>24</sup> See <https://www.misoenergy.org/legal/business-practice-manuals/>.

1 transmission facilities and preliminary study results, Big Rivers and NGR  
2 both believe that large Network Upgrade Costs are unlikely.

3 The PGIA applicant also accepts the risks of MISO ordering a  
4 curtailment on the facility until a permanent GIA is received. Such  
5 curtailment or operating limit will be reviewed and updated by MISO on a  
6 quarterly basis. Historically, such operating limits have been rare. A list  
7 of MISO's Quarterly Operating Limits since 2009 is included in OASIS'  
8 Transmission Service Studies.<sup>25</sup> The proposed Amendment No. 1 adds  
9 language to the PPA to address this possible issue.

10

11 **IV. BENEFITS TO BIG RIVERS' MEMBERS**

12

13 **Q. How do these amendments affect the economic value of the PPA?**

14 A. In my testimony in Big Rivers' application in Case No. 2020-00183, I  
15 presented a calculation of the value of all three solar power purchase  
16 agreements totaling \$105.7 million, \$58.1 million of which was attributable  
17 to the Unbridled PPA. See Exhibit Eacret-6. That value represented the  
18 difference between the contract price and the market values of the  
19 commodities (energy, capacity, ancillary services, and environmental

---

<sup>25</sup> [http://www.oasis.oati.com/woa/docs/MISO/MISOdocs/Transmission\\_Studies.html](http://www.oasis.oati.com/woa/docs/MISO/MISOdocs/Transmission_Studies.html) .

1 attributes) received. For reference, I have attached a copy of Exhibit  
2 Eacret- 15 from my original direct testimony in Case No. 2020-00183.

3 To reflect the new contract terms and market conditions, the  
4 following changes to Exhibit 15 are required:

- 5 1. Revise the contract price from \$29.60 to \$38.10/MWh;
- 6 2. Revise the generation figures down to reflect the less efficient  
7 panels;
- 8 3. Update the energy price and volume projections;
- 9 4. Update the capacity price and volume projections, including  
10 incorporating the use of the Effective Load Carrying Capacity  
11 (ELCC) model;
- 12 5. Update the Renewable Energy Certificate market  
13 assumptions; and
- 14 6. Increase the assumption for Big Rivers' Network Upgrade  
15 Cost obligation.

16 With the new contract terms and updated assumptions, the value of the  
17 PPA to our Members actually increases to \$85.9 million. *See* Exhibit  
18 Eacret-7, which shows the projected value of the PPA with the proposed  
19 amendments. While the higher contract price, lower generation volumes,  
20 ELCC assumptions, and Network Upgrade Cost assumptions hurt the  
21 valuation, the significant increase in the energy and capacity market price

1 assumptions results in the increased value. See Exhibit Eacret-8 for a  
2 reconciliation of the calculation presented in Case No. 2020-00183 of the  
3 original PPA's value and the current calculation of the PPA with the  
4 proposed amendments.

5

6 **Q. What would the value of the contract be if NGR honored the**  
7 **original terms?**

8 A. Factoring in the significant increase in the updated energy and capacity  
9 market price assumptions, the contract would be worth \$127.7 million if  
10 NGR honored all of the original terms, or \$41.8 million more than the  
11 amended version. See Exhibit Eacret-9, which shows the calculation of  
12 updated value of the original PPA.

13

14 **Q. Could Big Rivers issue another RFP and find another solar**  
15 **provider? What is the market value of solar contracts today?**

16 A. Big Rivers issued an All Source Request For Proposals ("*RFP*") on April 1,  
17 2022. The average price of the solar responses with similar terms to the  
18 RFP was around [REDACTED].

19

20 **Q. What protection does Big Rivers have against NGR refusing to**  
21 **honor the amended agreement?**

1 A. NGR has agreed to [REDACTED] the current credit support, to [REDACTED]  
2 [REDACTED] in credit support.

3

4 **Q. Do you recommend that the Commission approve the amendments?**

5 Yes. This solution makes the best of a bad situation. NGR will not honor  
6 the original PPA. The alternatives are legal action against NGR and  
7 finding another solar developer; keeping the credit support and finding  
8 another solar developer; or agreeing to these amendments. The result of  
9 any legal action is uncertain as to timing and outcome. The amendments  
10 retain approximately two-thirds of the original contract value for our  
11 Members, keep the Nucor pricing structure intact, and allow Big Rivers to  
12 increase the diversity of its resources as encouraged by economic  
13 development candidates and credit rating agencies.

14

15 **Q. What is the status of the other two solar contracts presented in  
16 Case No. 2020-00183?**

17 A. As the Commission is aware, Big Rivers executed two other solar contracts  
18 totaling 100 MW with Community Energy with a twenty-year fixed price of  
19 \$27.30/MWh on the same day that we executed the contract with NGR,  
20 May 26, 2020. Community Energy notified Big Rivers in June of 2021, that  
21 they were unlikely to be able to honor those contracts. This was before

1 issues with the MISO interconnection queue were known and before the  
2 Auxin Solar filing with the Department of Commerce, so this was purely  
3 based on cost and price.

4 Community Energy was acquired by the AES Corporation (“AES”) in  
5 December of 2021. AES has indicated that it does not intend to honor the  
6 contracts, either. Big Rivers continues to try to negotiate a reasonable  
7 resolution with AES.

8

9 **Q. Does this conclude your testimony?**

10 A. Yes.


**BIG RIVERS ELECTRIC CORPORATION**

**ELECTRONIC APPLICATION OF  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF AMENDMENT TO  
POWER PURCHASE AGREEMENT**

**Case No. 2022-00296**


**VERIFICATION**

I, Mark J. Eacret, verify, state, and affirm that I prepared or supervised the preparation of the Direct Testimony filed with this Verification, and that this Direct Testimony is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

  
\_\_\_\_\_  
Mark J. Eacret

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Mark J. Eacret on this the 22  
day of September, 2022.

  
\_\_\_\_\_  
Notary Public, Ky. State at Large  
My Commission Expires 1-14-2026  
# KYNP43026



## **Professional Summary**

Mark J. Eacret  
Vice President Energy Services  
Big Rivers Electric  
Corp  
201 Third St  
Henderson, Kentucky 42420  
(270) 844-6126

### **Professional Experience**

Big Rivers Electric Corporation  
Vice President Energy Services – 2015 to present

Sunflower Electric Power Corporation – 2014  
Senior Manager of Market Operations and Power Contracts

Ameren Energy Resources  
Vice President of Business Services and Controller 2011-2013  
Controller 2007-2011  
Manager of Pricing and Analysis 1999-2007

Cinergy Corporation  
Various Wholesale Power Analytical Positions 1991-1999  
Various Accounting Positions of increasing responsibility 1980-1991

### **Education**

Master of Business Administration with a concentration in Finance  
Indiana University-Bloomington

Bachelor Degree (Accounting Major)  
Indiana University – Indianapolis

# RatingsDirect®

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## Summary:

# Big Rivers Electric Corp., Kentucky; Rural Electric Coop

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## Summary:

# Big Rivers Electric Corp., Kentucky; Rural Electric Coop

### Credit Profile

Big Rivers Electric Corp. ICR

*Long Term Rating*

BBB/Stable

Upgraded

## Rating Action Overview

- S&P Global Ratings raised its issuer credit rating on Big Rivers Electric Corp. (BREC), Ky., to 'BBB' from 'BBB-'.
- The outlook is stable.
- The higher rating reflects our view of load growth that should contribute to revenue stability, coal fleet and carbon-intensity reductions, and favorable historical and projected financial metrics.

## Security

BREC's long-term debt is secured by property pledged under its mortgage indenture. The indenture obligates the utility to establish rates that are expected to yield a margins-for-interest ratio of 1.1x in each fiscal year.

Although we do not rate the utility's privately placed debt, we factor these debt balances in our assessment of BREC's credit quality. As of Dec. 31, 2021, the utility reported \$757 million of long- and short-term debt, which management projects will increase to \$956 million in 2022 in connection with repowering projects, before declining to \$728 million in 2025.

## Credit overview

Three large retail electric loads are investing \$50 million-\$1.7 billion in new facilities for their businesses within the service territories of BREC's member cooperatives. These new and expanded facilities should translate into electricity consumption that can support a more predictable revenue stream and help shield BREC from becoming dependent on revenues from energy sales in competitive wholesale markets if non-member municipal customers do not renew existing intermediate-term contracts for purchases of BREC power.

The cooperative is reducing its carbon intensity through the recent conversion of a portion of the utility's coal generation fleet to natural gas.

The cooperative's debt service coverage was at least 1.6x in fiscal years 2020-2021 and reasonable projections indicate stronger coverage through fiscal 2025, except for fiscal 2023 when management plans to extinguish about half of a bullet maturity with cash and the balance through a refinancing.

Constraining the rating are:

- BREC members' significant dependence on revenues from industrial customers that we view as more vulnerable to

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**Exhibit Eacret-2**

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economic cycles than residential customers;

- The service territory's weak income levels that could limit the utility's ratemaking flexibility; and
- Coal's ongoing substantial contribution to generation despite retirements of portions of the coal-fired generation fleet.

BREC is a generation and transmission cooperative that derived almost half of its 2021 operating revenues from three distribution cooperatives and the balance principally from sales to non-member utilities with whom it has contracts. BREC earns the remainder of its revenues from market sales.

Following the loss of two aluminum smelter loads that accounted for about two-thirds of energy sales almost a decade ago, the utility faced a long generation position. To mitigate the cooperative's exposure to volatile power markets, management contracted to sell much of the surplus power to municipal utilities under contracts expiring in 2026 and 2029. More recently, Nucor Corp. is developing a \$1.7 billion steel plate manufacturing plant in Brandenburg, Blockware Mining is constructing a \$50 million cryptocurrency server facility in Paducah, and Pratt Industries is constructing a \$500 million paper mill in Henderson. These facilities will add 300 megawatts (MW) of load or almost 90% of the load the municipalities contribute. The industrial load additions should temper exposure to merchant energy markets if the municipal utility systems do not renew their wholesale power purchase agreements with BREC when they expire in the latter part of the decade. If the municipal customers extend their contracts, the cooperative might need to secure through contracts or construction additional generation resources to simultaneously serve those customers and the industrial loads the system is adding.

Unlike many other cooperative utilities, BREC does not have autonomous rate-setting authority. Rather, the Kentucky Public Service Commission (PSC) establishes the cooperative's wholesale rates and its members' retail rates. Tempering the absence of rate-setting autonomy is a history of supportive regulatory decisions and utility projections of modest rate increases principally through the utility's formulaic, monthly fuel clause and purchased power cost mechanisms.

Coal accounted for 100% of 2021's self-generation and self-generation supported 83% of the year's energy sales. This year, BREC completed its conversion of its two Green station generation units to natural gas. Based on the gas conversions and plans to add contract purchases of solar electricity, management projects coal's contribution to total energy sources will decline to 52% by 2025 from 83% in 2021. Although coal will continue to comprise a substantial portion of energy sales, the meaningful reductions should temper the cooperative's financial exposure to potentially more stringent federal emissions regulations.

### **Environmental, social, and governance**

Although BREC projects reducing coal-fired megawatt-hours by 41% by 2025 relative to 2021 because of the conversion of its Green station units to natural gas, coal-fired electricity from the larger Wilson station will continue to account for 52% of energy sales, which we view as placing moderate negative pressure on the credit quality of the cooperative.

Energy Information Administration data show that residential rates are 10% higher than state averages, which we view as creating social risks that could limit financial flexibility, especially in an inflationary environment that creates a need

for rate increases to cover higher operating, capital, and borrowing costs. The state's high poverty rate, which pervades portions of the service territory, compounds affordability issues and social risks, which we consider to be moderately negative to credit quality.

We believe management demonstrated favorable governance attributes through its pursuit of contracts for sales of the output of surplus generation capacity to non-member utilities to temper market exposure and to more efficiently allocate fixed costs previously borne by industrial customers that severed their ties with BREC in 2013. In addition, the utility benefits from a proactive regulator that in addition to overseeing the utility's rates, has demonstrated a commitment to monitoring management and board actions and financial performance.

## Outlook

The stable outlook reflects reduced risk of long-term exposure to competitive wholesale markets; lower carbon intensity; and projections of continued sound debt service coverage, liquidity, and leverage.

### Downside scenario

We could lower the rating if the utility cannot sustain sound financial performance because of carbon-reduction costs or if the industrial customers, despite their substantial investments in facilities within BREC's service territory, experience economic dislocations.

### Upside scenario

Although we believe load growth and management actions have enhanced the stability and predictability of the revenue stream, we do not expect to raise the rating further within our two-year outlook horizon. We believe the utility continues to face material exposures that include a substantial carbon dependence, a significant reliance on industrial customers, and rates that we consider high relative to low income levels.

## Related Research

- Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at [www.standardandpoors.com](http://www.standardandpoors.com) for further information. Complete ratings information is available to subscribers of RatingsDirect at [www.capitaliq.com](http://www.capitaliq.com). All ratings affected by this rating action can be found on S&P Global Ratings' public website at [www.standardandpoors.com](http://www.standardandpoors.com). Use the Ratings search box located in the left column.

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**Exhibit Eacret-2**

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**RATING ACTION COMMENTARY**

# **Fitch Upgrades Big Rivers Electric Corporation to 'BBB'; Outlook Stable**

Mon 15 Aug, 2022 - 2:05 PM ET

Fitch Ratings - New York - 15 Aug 2022: Fitch Ratings has upgraded the following ratings on Big Rivers Electric Corporation, KY to 'BBB' from 'BBB-':

--Issuer Default Rating (IDR).

The Rating Outlook is Stable.

**ANALYTICAL CONCLUSION**

The Issuer Default Rating (IDR) is upgraded to 'BBB' from 'BBB-' reflecting a continued trend of improved financial performance, which has resulted in consistently lower leverage over the past few years. The improved performance is due to several factors including full realization of member rates, increased demand from contracted sales to nonmembers, and greater cash flows from cost recovery of regulatory assets.

Big Rivers' leverage ratio, measured as net adjusted debt to adjusted funds available for debt service (FADS), declined from over 9.0x in 2017 to 7.2x in 2020, and declined further in 2021 due to stronger revenue collections and an increase in non-cash depreciation expenses for the year. Further, Fitch expects a continued trend of strong cash flow and leverage ratios through its FAST stress scenario that support the 'BBB' rating.

Fitch continues to assess Big Rivers' three members to have midrange credit quality, which constrains the corporation's overall revenue defensibility when coupled with the absence of independent rate-setting authority, and likely limits the upside of the overall IDR. Lastly, a consistently low operating cost burden, manageable capital needs and a supportive regulatory regime are also important rating considerations.

## **CREDIT PROFILE**

Big Rivers Electric Corporation is a nonprofit generation and transmission cooperative formed in 1961, providing wholesale electric and transmission service to three electric distribution cooperatives pursuant to all-requirements contracts through Dec. 31, 2043. The three members provide service to a total of approximately 121,000 retail customers located in 22 western Kentucky counties. Demographic indicators and financial performance of the three distribution systems are satisfactory and provide sufficient support for the rating.

## **KEY RATING DRIVERS**

### **Revenue Defensibility: 'bbb'**

Strong Contractual Framework, Midrange Member Credit Quality

Revenue defensibility is midrange despite otherwise very strong revenue source characteristics provided by the long-term, all-requirements power supply contracts. The midrange assessment principally reflects the credit quality of the member utilities along with the regulatory framework within which Big Rivers and its customers operate. While the regulatory regime has been constructive historically, neither Big Rivers nor its three customers have autonomy over rate-setting.

### **Operating Risk: 'a'**

Coal-Dominated Resource Base, Low Cost Burden

The strong operating risk assessment reflects a rising, but still low operating cost burden that has averaged 5.6 cents/KWh over the past five years. Operating cost flexibility is assessed at neutral given Big Rivers has idled, retired or converted much of its coal-fired capacity over the past several years.

Management is in the process of adding renewable solar capacity through three separate purchase power agreements (PPAs) totaling 260MW, further diversifying the resource



base. The PPAs have been executed with commercial operation expected in 2024.

## **Financial Profile: 'bbb'**

Leverage Trending Lower

Big Rivers' financial profile remains midrange but margins and leverage ratios have improved significantly over the past few years. Strong financial results are expected to continue as greater contracted energy and capacity sales to nonmember utilities and industrial customers continue over the next five years. In addition, higher cash flow from recovery of regulatory assets will help sustain the improvement in margins and the leverage ratios.

## **Asymmetric Additional Risk Considerations**

There are no additional asymmetric risks affecting the rating.

## **RATING SENSITIVITIES**

Factors that could, individually or collectively, lead to positive rating action/upgrade:

--Continued positive trend in financial performance and a leverage ratio that is closer to 6.0x on a sustained basis through Fitch's base and stress cases;

--A positive shift in purchaser credit quality that results in a higher assessment of revenue defensibility.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

--A weakening in margins or higher debt levels that lead to leverage to levels closer to 10.0x or higher on a sustained basis through Fitch's base and stress cases;

--A downward shift in purchaser credit quality that results in a lower assessment of revenue defensibility.

## **BEST/WORST CASE RATING SCENARIO**

International scale credit ratings of Sovereigns, Public Finance and Infrastructure issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of

rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit <https://www.fitchratings.com/site/re/10111579>.

## **SECURITY**

Big Rivers' IDR reflects Fitch's assessment of the utility's vulnerability to default on its financial obligations.

## **REVENUE DEFENSIBILITY**

### **Strong Contractual Framework**

Revenue source characteristics are very strong. All three of Big Rivers' customers are signed to long-term, all-requirements take-and-pay power contracts. All costs associated with the delivery of power and energy/services, including debt service on the bonds, are billed to the customers on a monthly basis, leading to a de facto unlimited step-up. Given there are only three members, the rating on the bonds is heavily influenced by the credit quality of all three customers.

### **Rate Flexibility**

Rate flexibility is assessed to be stronger. The Kentucky Public Service Commission (KPSC) is charged with approving rates for Big Rivers and its members. Wholesale rates charged to the members consist of a demand charge and an energy charge per kWh consumed, as approved by KPSC. However, Big Rivers has certain approved riders, including a fuel adjustment clause and an environmental surcharge, which helps provide timely pass-through of variable charges.

Supportive regulatory policies, including reclassification of certain assets as regulatory assets for recovery through existing rates, successful historical rate case approvals, and recent approval allowing for the ability to utilize excess net margin to amortize future regulatory liabilities (in lieu of requiring all excess margin returned as a bill credit to members), point to a constructive regulatory environment.

On the member level, rates are set for full cost recovery. However, while the regulatory environment for rate recovery has been supportive, approval of rate cases by an outside entity could result in delayed cost recovery, potentially higher revenue variability and

weaker overall revenue defensibility compared with nonregulated entities, and thus limits rate flexibility in Fitch's view.

## **Purchaser Credit Quality**

### Midrange Purchaser Credit Quality

Revenue defensibility primarily reflects the member credit quality as evaluated using Fitch's purchaser credit index (PCI), which reflects the weighted average credit quality of the relevant obligors. Fitch's PCI score of 2.83 is based on an evaluation of all three-member cooperatives: Meade County Rural Cooperative Corporation, KY comprising approximately 17% of Big Rivers' revenues; Kenergy Corporation, KY (61% of revenues); and Jackson Purchase Energy Corporation, KY (22% of revenues).

The PCI reflects the strength of the member's service area, retail rate competitiveness and ability to absorb rate increases through an analysis of its service area, as well as each members' 2021 financial performance. Fitch assesses the service area characteristics for the largest member, Kenergy, to be strong based on the low unemployment rate and modestly growing customer base.

However, the service area's low median household income and proportionally low amount of revenues derived from residential users (23% of total revenues) contribute to the midrange assessment. In addition, financial performance is relatively weak. On the positive side, Kenergy's customer base is slowly growing and retail rates are very competitive.

### Lower Reliance on Off-System Sales, But Non-Member Contracts Expire Beginning in 2026

The termination of the smelter contracts resulted in the loss of 850MW of load in 2014, leaving Big Rivers in a very long resource position. Big Rivers worked to steadily rebalance capacity with newly contracted load through a combination of supply-side and demand-side management, including signing bilateral contracts with Kentucky Municipal Energy Agency (IDR, A/Stable), a consortium of Nebraska-based utilities, and full-requirements sales to the city of Owensboro, KY. These efforts, together with the retirement of Coleman Station and Reid Unit 1, and decommissioning of the Henderson plant, have led to a much more balanced resource position relative to current and expected demand.

Reliance on market sales is expected to be limited through 2026. While total resources are still in excess of peak demand, member load is anticipated to comprise over 75% of total revenue, and firm contracted sales to non-members 17%. Market sales are projected to be

just 6% of total revenue in 2022. Sales to Nucor Steel are set to begin in 2023 (200MW), which is to be followed by other contracted industrial sales within member service territories, leading to even lower expected off-system sales over the next few years.

However, 250MWs of full-requirements contracts with non-members are set to expire beginning in 2026. As a result, Fitch considers the potential future reliance on off-system and non-contracted sales to be an asymmetric risk consideration, but does not believe this further limits the revenue defensibility assessment at this time.

## **OPERATING RISK**

Big Rivers' strong operating risk assessment reflects a consistently low operating cost burden averaging 5.6 cents/KWh since 2017. While the cost burden has been rising, reaching 6.9 cents/KWh in 2021 due to the one-time increase in depreciation expense for the year, the cost burden is still well below the upper threshold to qualify for the strong assessment. Management anticipates operating costs will decline in 2022 with lower anticipated depreciation expense, which should lead to a lower cost burden than 2021.

Operating costs are anticipated to remain low as power is supplied mainly by low-cost vintage generating units and contracted purchases, all of which is further supported by access to the MISO market.

### **Operating Cost Flexibility**

Fitch assesses Big Rivers' operating cost flexibility to be neutral, as its past reliance on coal-fired generation has significantly declined. The assessment considers the corporation's current resource base that includes three owned generating facilities as well as contracted hydroelectric capacity. In 2021, approximately 78% of total capacity was coal-fired, followed by hydro capacity at 16% and the remainder natural gas. However, the ongoing transition away from coal-fired generation has significantly increased fuel diversity while lowering carbon emissions.

Big Rivers currently owns and operates over 900MW of net generating capacity consisting of the following facilities: Green generating station, a two-unit 454MW facility recently repowered to burn natural gas; Wilson generating station, a 417MW single-unit coal-fired facility; and the smallest of BR's generating assets, Reid Station, a single-unit 65MW gas-fired plant. In addition, Big Rivers also receives power through contract with Southeastern Power Administration for 178MW of hydroelectric capacity, bringing total capacity to over 1,100MW. Peak demand was nearly 700MW in 2021, but expected to rise with newly contracted industrial sales.

## Environmental Considerations and Clean Energy Transition

The Commonwealth of Kentucky does not have renewable portfolio standards. However, Big Rivers has been actively pursuing asset diversification and carbon reduction strategies over the past several years. In addition to repowering Green station to natural gas in 2022, Big Rivers will be adding solar capacity through long-term fixed-price PPAs. After a request for proposal process, Big Rivers selected three separate solar projects from two developers, totaling 260MW's.

The projects are expected to achieve commercial operation in 2024. By 2030, management predicts it will have reduced carbon emissions by almost 80% from 2005 levels with gas-fired generation comprising 35% of total capacity, followed closely by coal at 31%, solar (29%) and hydropower.

### **Capital Planning and Management**

Capital planning and management are assessed to be stronger based on a sustained trend of lower Fitch-calculated average age of plant over the past few years. Big Rivers had an exceptionally high average age of plant of 49 years in 2018, which indicated high lifecycle needs.

Since then, Big Rivers received approval to treat several of its generating facilities as regulatory assets and has stopped deferring depreciation on some of its other coal-fired units. The regulatory asset designation allows Big Rivers to include a larger proportion of the depreciation of these assets into its rate case with regulators for future cost recovery. The higher annual depreciation results in greater annual FADS, but also results in a decline in the average age of plant ratio (calculated as accumulated depreciation/annual depreciation), a primary driver of the stronger capital planning assessment. In 2021, the age of plant was just seven years, but lower anticipated depreciation expense going forward should lead to age of plant that will be higher than 2021, but remain below the 20-year threshold for the strong assessment.

Management anticipates capital spending for 2022-2025 to total a fairly sizable \$300 million, which continues a recent trend of sound capital reinvestment undertaken over the past few years. In addition to routine systemwide upkeep and renewal projects, Big Rivers expects to complete the removal of the existing scrubber system from Coleman Station and reassemble it onto the Wilson facility, as well as fund the Green station conversion project, the completion of a new headquarters building and other upgrades. Roughly \$200 million in

additional new money debt is expected to be issued to fund the proposed capital spending over the next few years.

## **FINANCIAL PROFILE**

Big Rivers' financial profile has improved over the past five years. In 2017, Fitch-calculated coverage of full obligations totaled 1.2x, and the leverage ratio was over 9.0x. Since then both ratios have improved, a result of the cooperative's risk mitigation strategy and approved rate plan from 2014, and lower total debt outstanding. Additionally, management received approval from KPSC to recover costs for certain regulatory assets, significantly increasing non-cash annual depreciation expense.

In fiscal 2021, a non-recurring increase in depreciation expense led to negative operating income for the year, but cash flows and FADS were much higher than historical levels due to the non-cash expense increase. The depreciation expense for 2021 was over \$170 million, and included a one-time use of member equity to amortize/reduce regulatory assets related to smelter load (a portion of retired assets not recoverable from members, as approved by the KPSC). The leverage ratio for the 2021 was below 6.0x.

Liquidity is neutral to assessment. Cash remains somewhat limited but at 39 days on hand in 2021, which is lower than previous days cash ratios due to the higher one-time depreciation expense in 2021. A senior secured revolving credit agreement was recently increased to \$150 million and extended to June 2024, providing total liquidity of 186 days as needed.

### **Fitch Analytical Stress Test (FAST)**

Fitch's base case scenario is informed by Big Rivers' financial forecast for fiscal years 2022-2025, which incorporates assumptions Fitch believes to be reasonable. The forecast includes new member load from Nucor and other large industrial customers, continued accounting for numerous regulatory assets in depreciation expense, a monthly member bill credit in 2022, and some additional debt.

The base case indicates an increase in the leverage ratio in year one (2022) to 7.0x, levels similar to 2020. By year two of the base case, revenues increase from contracted non-member sales (Nucor fully online) and FADS increases from an increase in non-cash depreciation expense, lowering leverage to closer just under 6.0x in 2023. The leverage ratio remains near this level through the remainder of the forward-look.

Fitch's stress analysis incorporates a two-year decline in sales followed by some growth in demand in years three and four. All of the base case assumptions are also applied. The results of this stress indicate an increase in the leverage ratio to 8.6x in 2022 before a presumed rate increase that would allow the cooperative to maintain at least 1.0x coverage and a minimal amount of cash in subsequent years. The leverage ratio is projected to decline to around 7.3x in 2023, and below 7.0x for the remainder of the stress scenario, which would be fully supportive of the 'BBB' rating.

## Debt Profile

The debt profile is neutral to the rating. Big Rivers had approximately \$700 million in total long-term debt outstanding as of YE 2021. All of the debt is fixed-rate, including Rural Utilities Service (RUS) loans, maturing no later than 2043. The debt includes the remaining maturity of the RUS loan series B of roughly \$125 million due in December 2023. Management expects to refinance or cash-fund this amount prior to maturity.

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

## REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

## ESG CONSIDERATIONS

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit [www.fitchratings.com/esg](http://www.fitchratings.com/esg)

## RATING ACTIONS

ENTITY / DEBT ↕

RATING ↕

PRIOR ↕

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Big Rivers Electric Corporation (KY)	LT IDR	BBB Rating Outlook Stable		BBB- Rating Outlook Positive
	Upgrade			

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Big Rivers Electric Corporation (KY) /Issuer Default Rating/1 LT	LT	BBB Rating Outlook Stable	Upgrade	BBB- Rating Outlook Positive
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[VIEW ADDITIONAL RATING DETAILS](#)

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Additional information is available on [www.fitchratings.com](http://www.fitchratings.com)

## **PARTICIPATION STATUS**

The rated entity (and/or its agents) or, in the case of structured finance, one or more of the transaction parties participated in the rating process except that the following issuer(s), if any, did not participate in the rating process, or provide additional information, beyond the issuer's available public disclosure.

## **APPLICABLE CRITERIA**

[U.S. Public Power Rating Criteria \(pub. 09 Apr 2021\) \(including rating assumption sensitivity\)](#)

[Public Sector, Revenue-Supported Entities Rating Criteria \(pub. 01 Sep 2021\) \(including rating assumption sensitivity\)](#)

## **APPLICABLE MODELS**

Numbers in parentheses accompanying applicable model(s) contain hyperlinks to criteria providing description of model(s).

[FAST Econometric API - Fitch Analytical Stress Test Model, v3.0.0 \(1\)](#)

## **ADDITIONAL DISCLOSURES**

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## **ENDORSEMENT STATUS**

Big Rivers Electric Corporation (KY)

EU Endorsed, UK Endorsed

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accordance with Articles 11(2) of Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 and The Credit Rating Agencies (Amendment etc.) (EU Exit) Regulations 2019 respectively.

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Utilities and Power    US Public Finance    North America    United States

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*In the Matter of:*

ELECTRONIC APPLICATION OF	)	
BIG RIVERS ELECTRIC CORPORATION	)	Case No.
FOR APPROVAL OF AMENDMENT TO	)	2022-00296
POWER PURCHASE AGREEMENT	)	

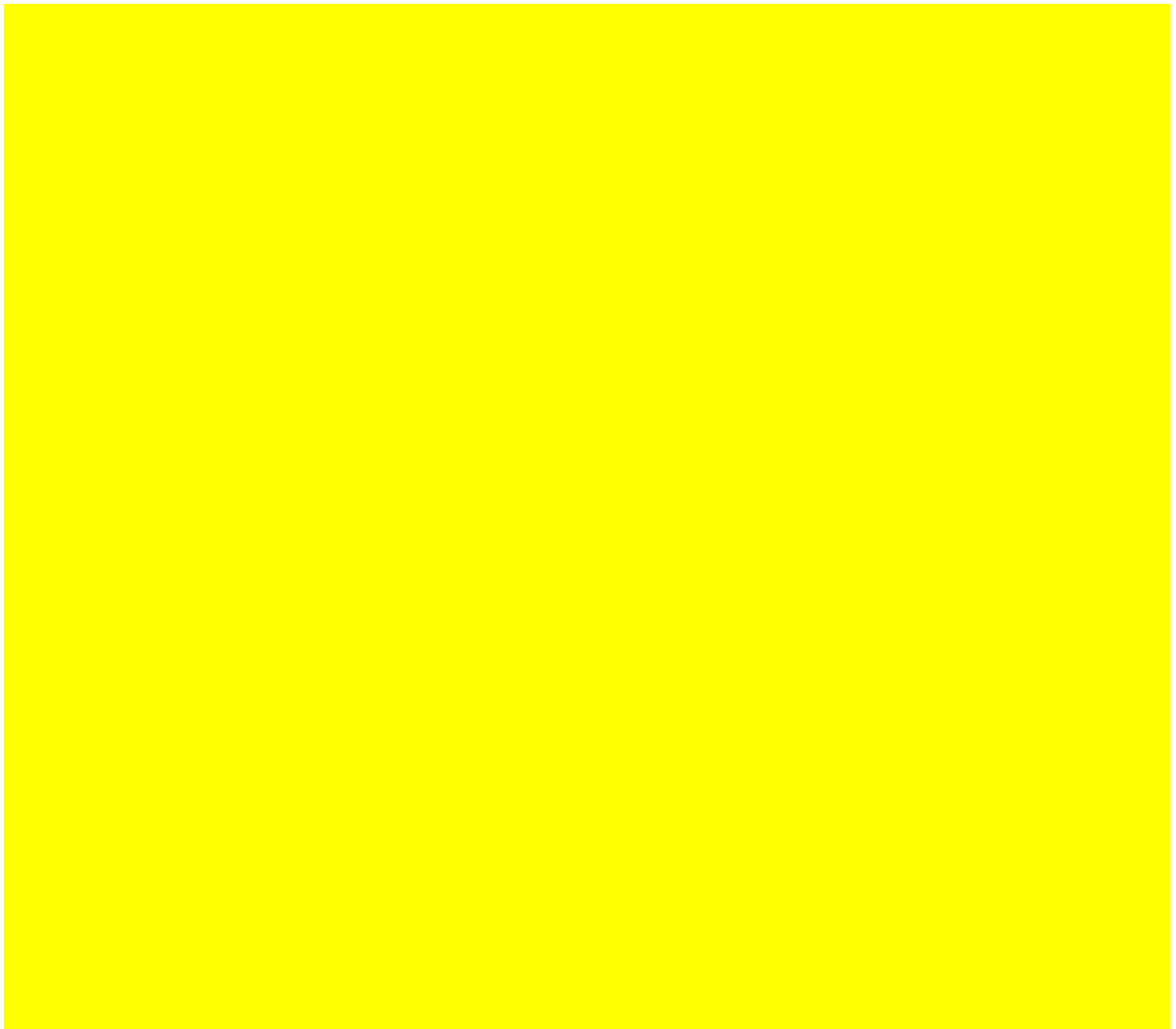
**CONFIDENTIAL EXHIBIT**

APPLICATION

FILED: September 22, 2022

EXHIBIT EACRET – 4

SUBMITTED UNDER MOTION FOR CONFIDENTIAL TREATMENT



# Impact of the Auxin Solar Tariff Petition

Solar Industry Impacts from U.S. Department of Commerce Investigation into Imports of Crystalline Silicon Photovoltaic Modules and Cells from Cambodia, Malaysia, Thailand and Vietnam

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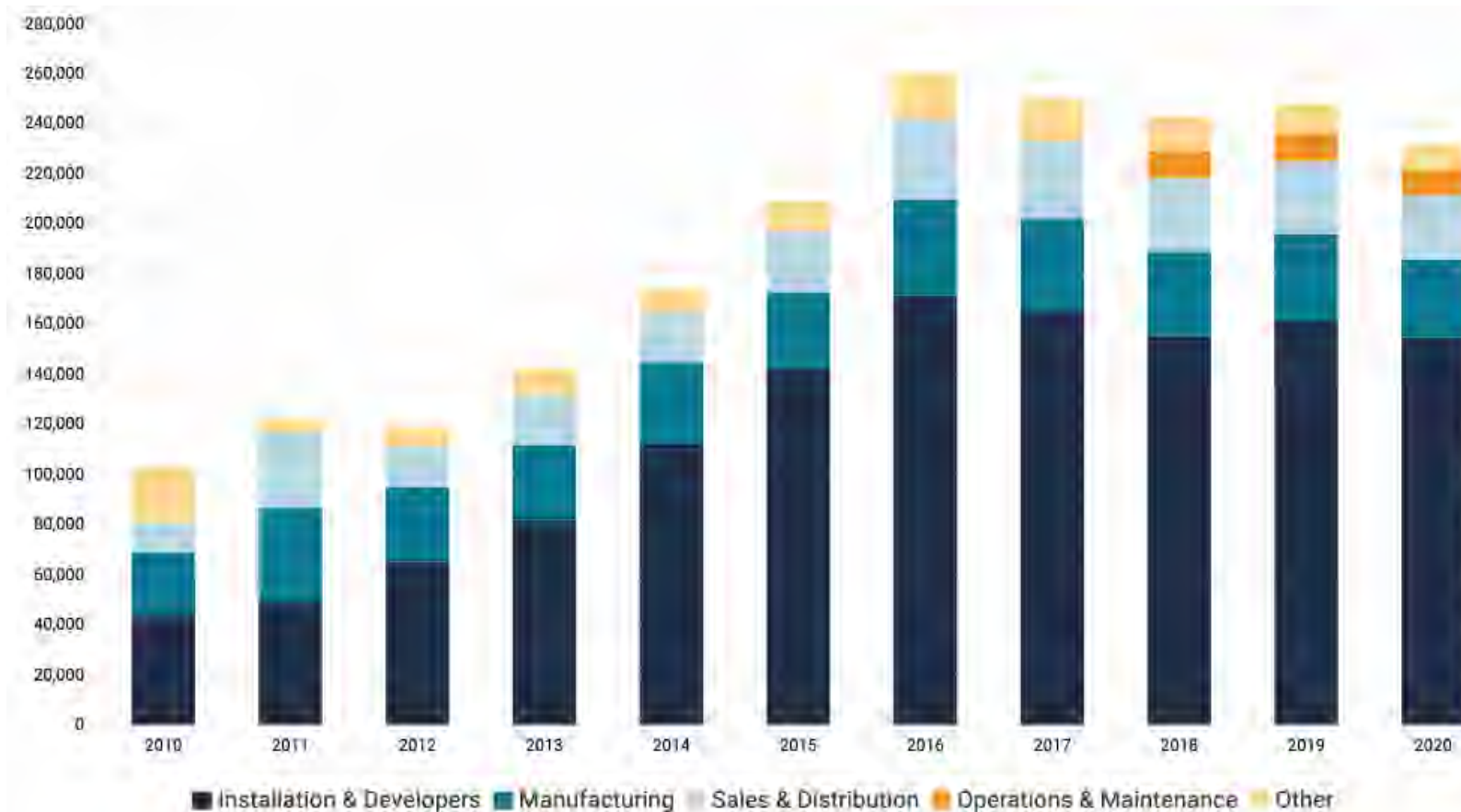
April 26, 2022

**Case No. 2022-00296**  
**Exhibit Eacret-5**



# Background: Solar is an Economic Engine

## U.S. Solar Workers by Job Category



- As of 2020, more than **230,000 Americans** work in solar at more than **10,000 companies** in every U.S. state.
- In 2021, the solar industry generated nearly **\$33 billion of private investment** in the American economy.

Source: National Solar Jobs Census 2020

Case No. 2022-00296 Exhibit Eacret-5

Powering the Solar+ Decade | 4/26/2022

# Methodology

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- Content that follows is based on results from two surveys and a separate impacts analysis.
- **General Survey**
  - This survey seeks to measure impacts of Dept. of Commerce's decision to take up the Auxin anti-circumvention petition on solar companies' business and employment expectations in 2022.
  - 730 responses collected between March 31 and April 21 from SEIA member and non-member companies.
  - From the 730 responses, we matched 596 business locations from SEIA's database of companies active in the U.S. solar industry. These responses make up all state-level impact analysis presented.





# Methodology

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## Project-Level Survey

- This survey focuses on impacts to specific utility-scale projects (generally larger than 1 MWac).
- Responses for this survey were collected between March 31<sup>st</sup> and April 21<sup>st</sup> from SEIA members and non-members.
- Multiple responses concerning the same project were identified and deduplicated such that the results represent impacts to 318 projects across 39 states.
- Projects reported as complete, or that had modules delivered or that will receive modules not covered by this proceeding were filtered out of this analysis.
- Of the 318 projects reported as impacted, 85 were matched to projects reported by the Energy Information Administration (EIA) as of the end of March 2022.

## Impacts Analysis

- SEIA's Research team conducted this analysis the week of April 18 – 22.
- The analysis aims to assess the impacts of constrained module supply on previously-expected U.S. solar deployment, represented by the baseline forecast presented in SEIA/Wood Mackenzie *US Solar Market Insight 2021 Year in Review*, released in early March 2022.
- The analysis assumes an affirmative decision on the Auxin petition, with tariffs imposed in the 50% - 250% range.
- Imported module supply from the named countries is sharply restricted (though not entirely eliminated), with global capacity outside the named countries expanding over time, in line with previously planned factory construction/expansion timelines.
- Existing and future module and cell supply data sourced from U.S. Customs and Border Protection, SEIA/Wood Mackenzie *US Solar Market Insight* and public announcements.



# Survey Results

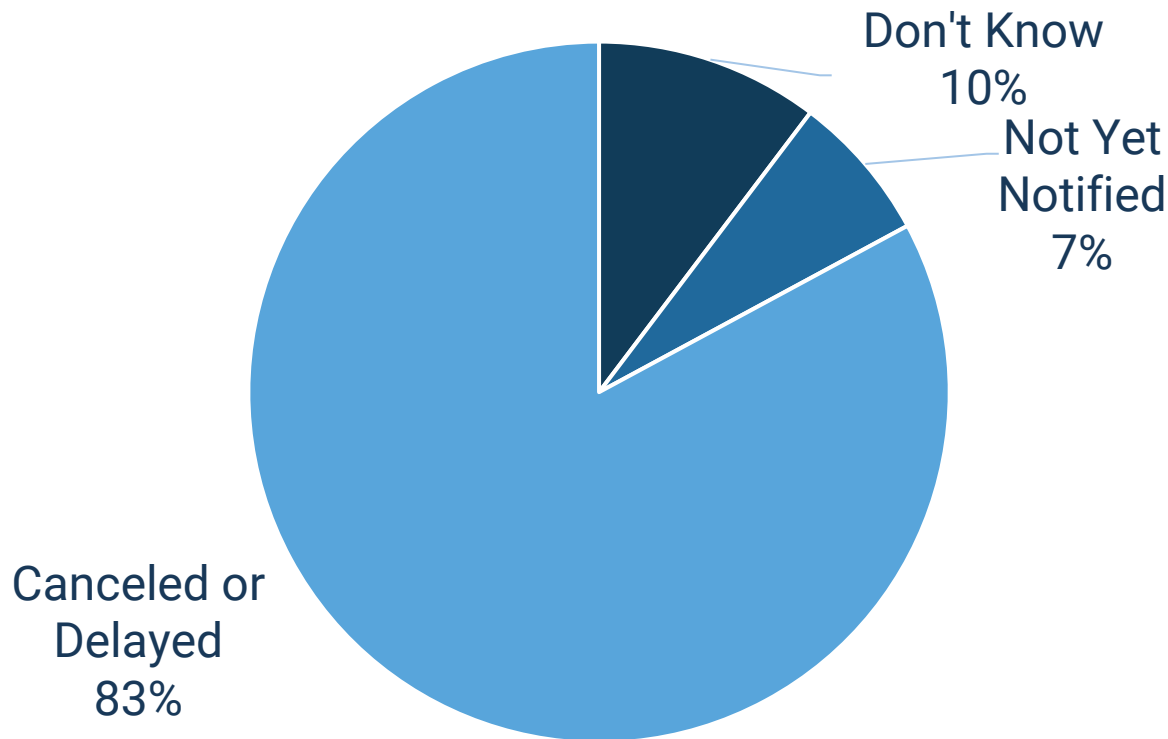
Data as of 4/21/2022

*730 survey responses from solar energy and energy storage companies*

*596 company locations matched to survey responses*

# If your company purchases or uses PV modules, have you received indication that your expected module supply has been delayed or canceled?

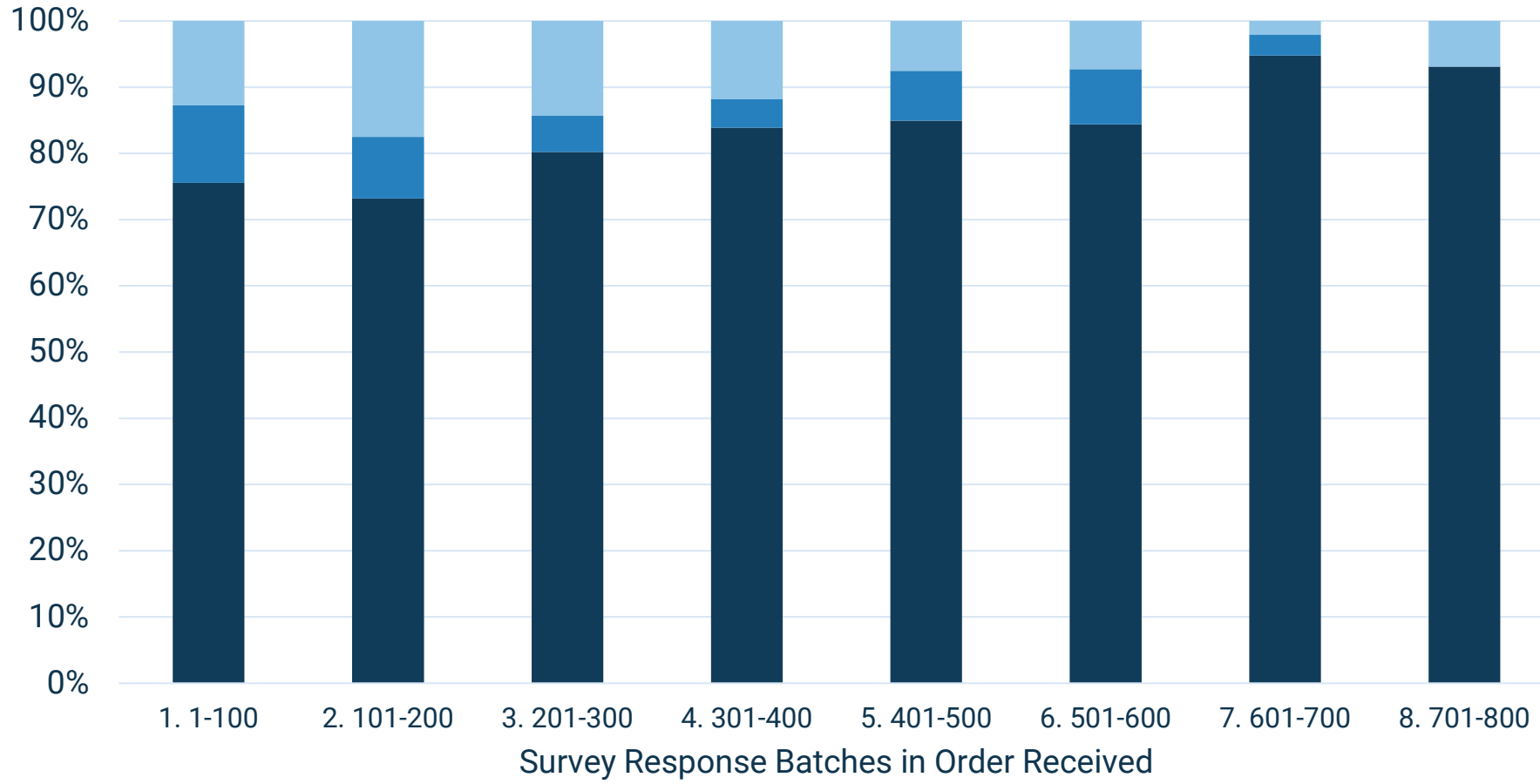
## Current Module Supply Status



**Four-fifths**

of respondents that purchase or use modules report canceled or delayed module supply.

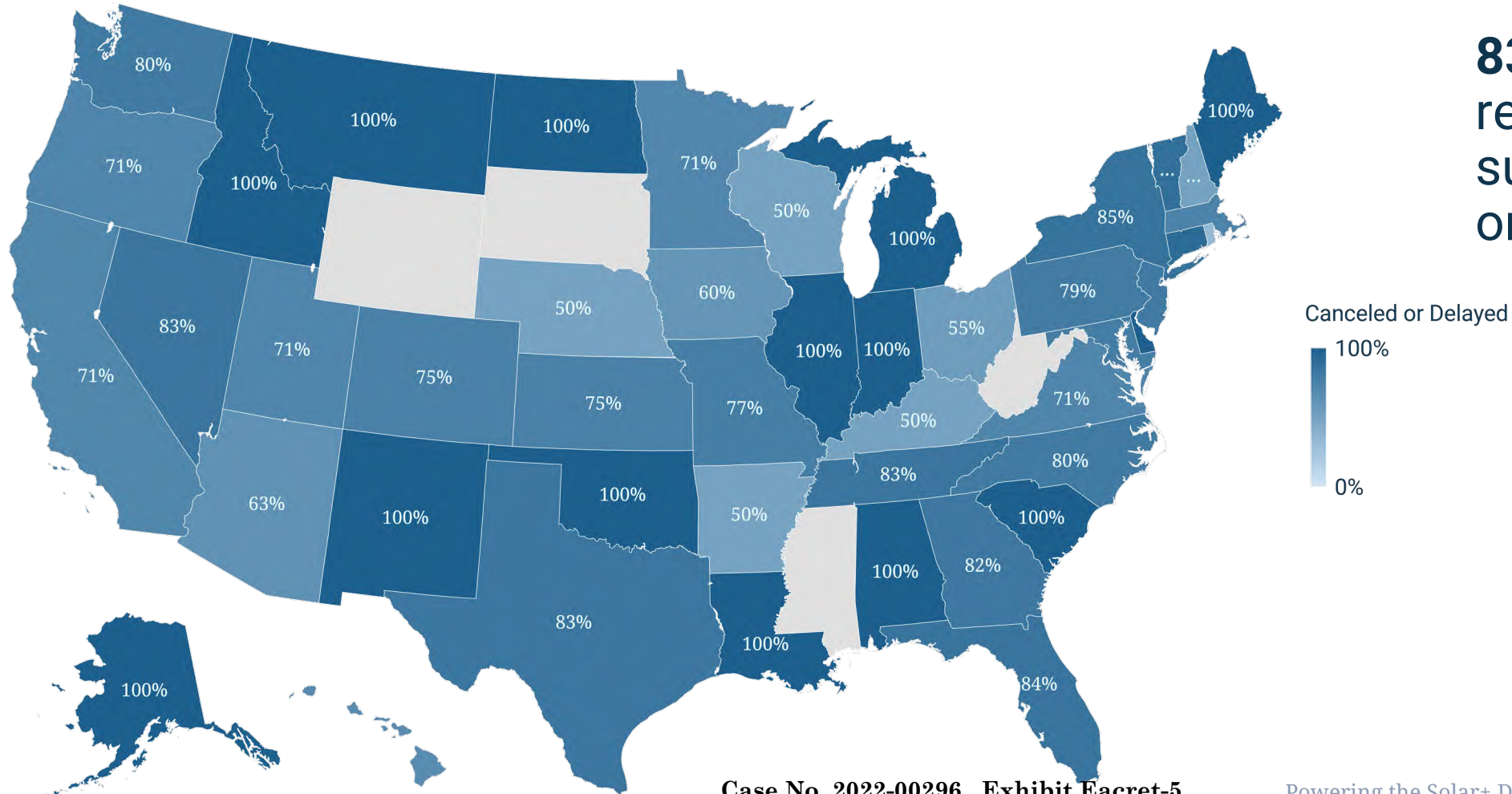
# If your company purchases or uses PV modules, have you received indication that your expected module supply has been delayed or canceled?



Reported  
cancellations  
and delays  
**increasing**  
over time

■ Canceled or Delayed ■ Not Yet Notified ■ Don't Know

# Percent of Respondents Reporting Delayed or Canceled Module Supply



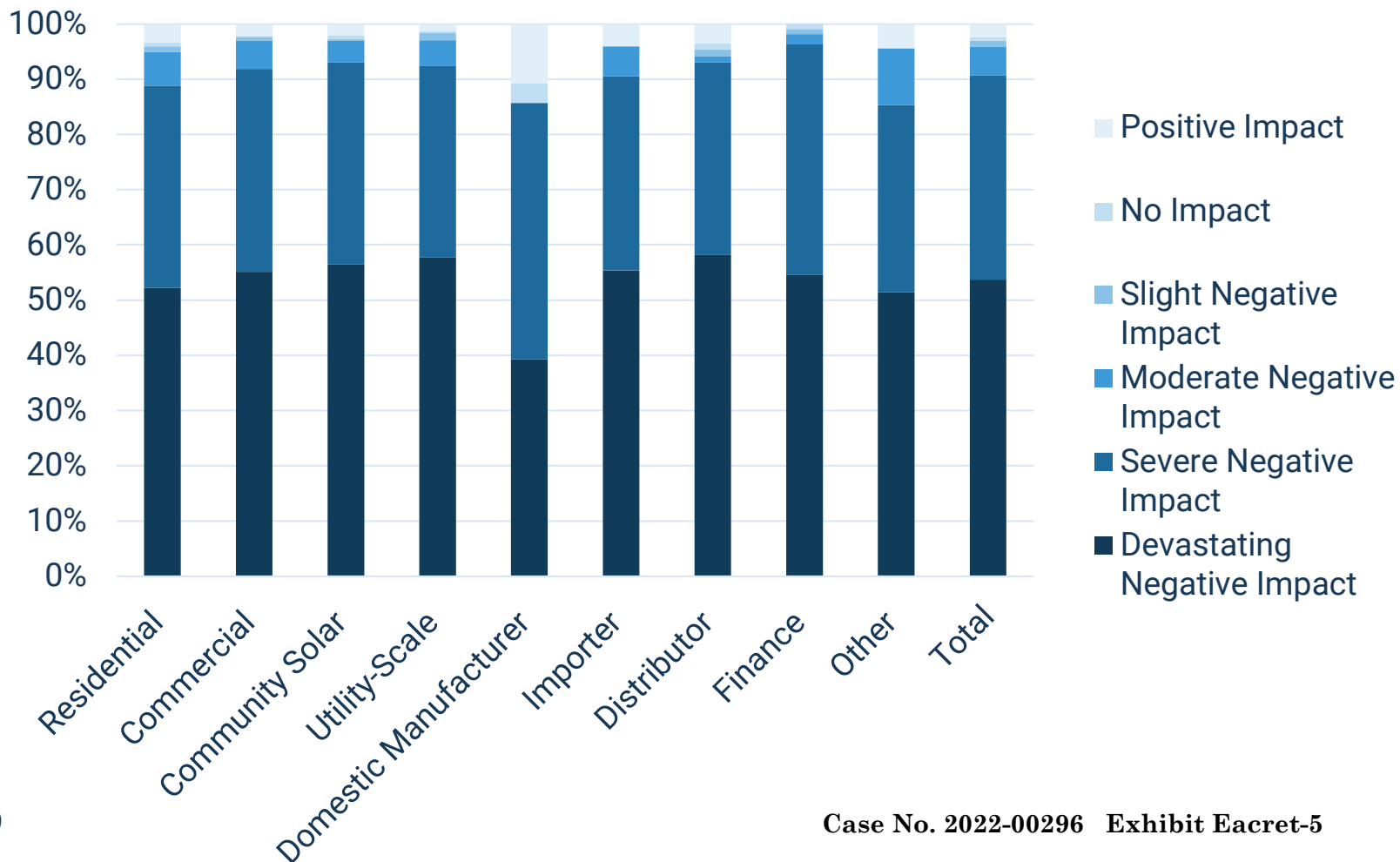
**83% of respondents report module supply cancellation or delay**

Canceled or Delayed



# How do you expect this investigation into imports from Cambodia, Malaysia, Thailand and Vietnam to impact your U.S. business in 2022?

Expected Impact on Solar Business by Company Type



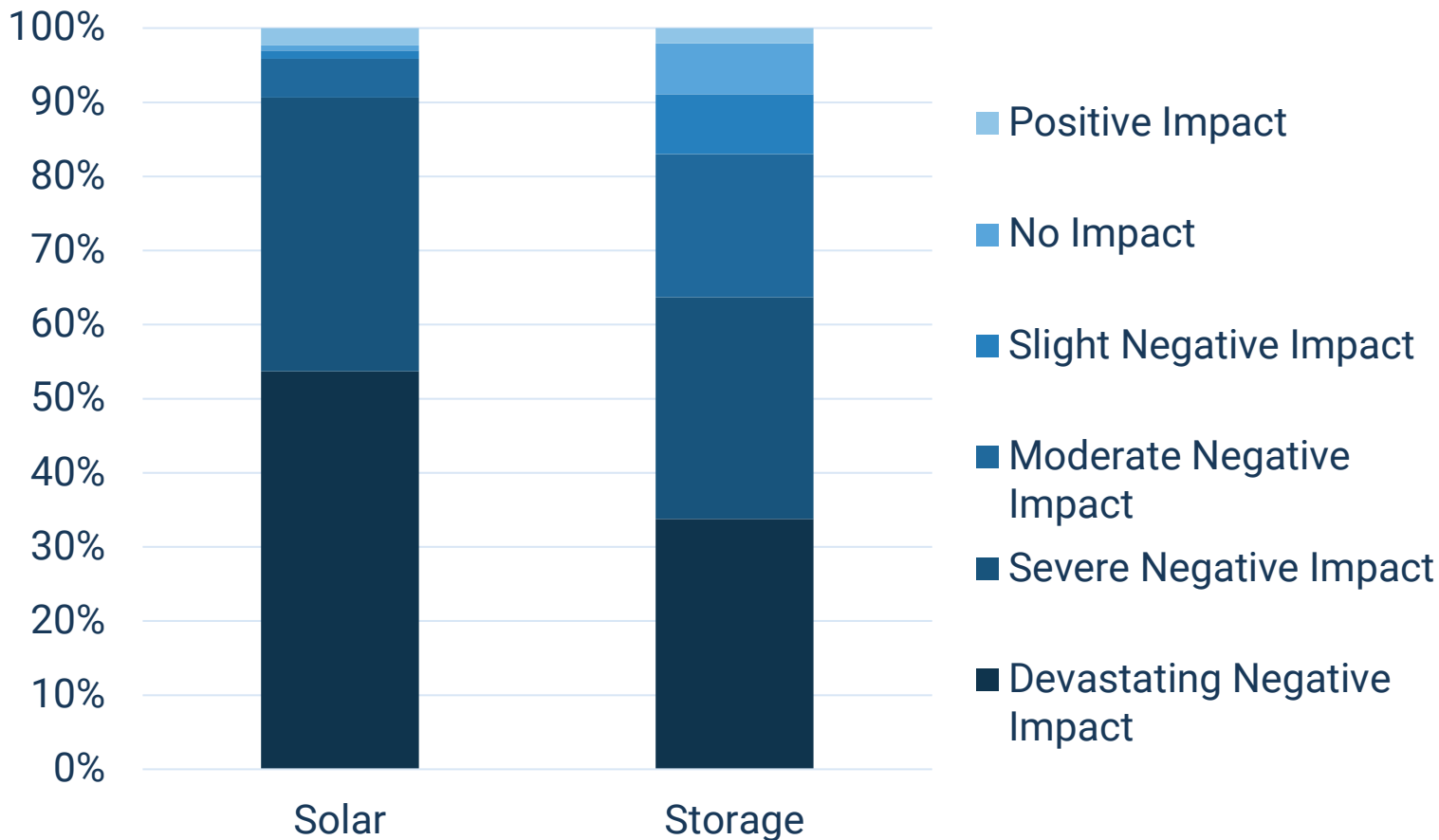
Companies expect damage across the value chain.

**80% of domestic manufacturers**

responding to the survey expect severe or devastating impacts.

# How do you expect this investigation into imports from Cambodia, Malaysia, Thailand and Vietnam to impact your U.S. business in 2022?

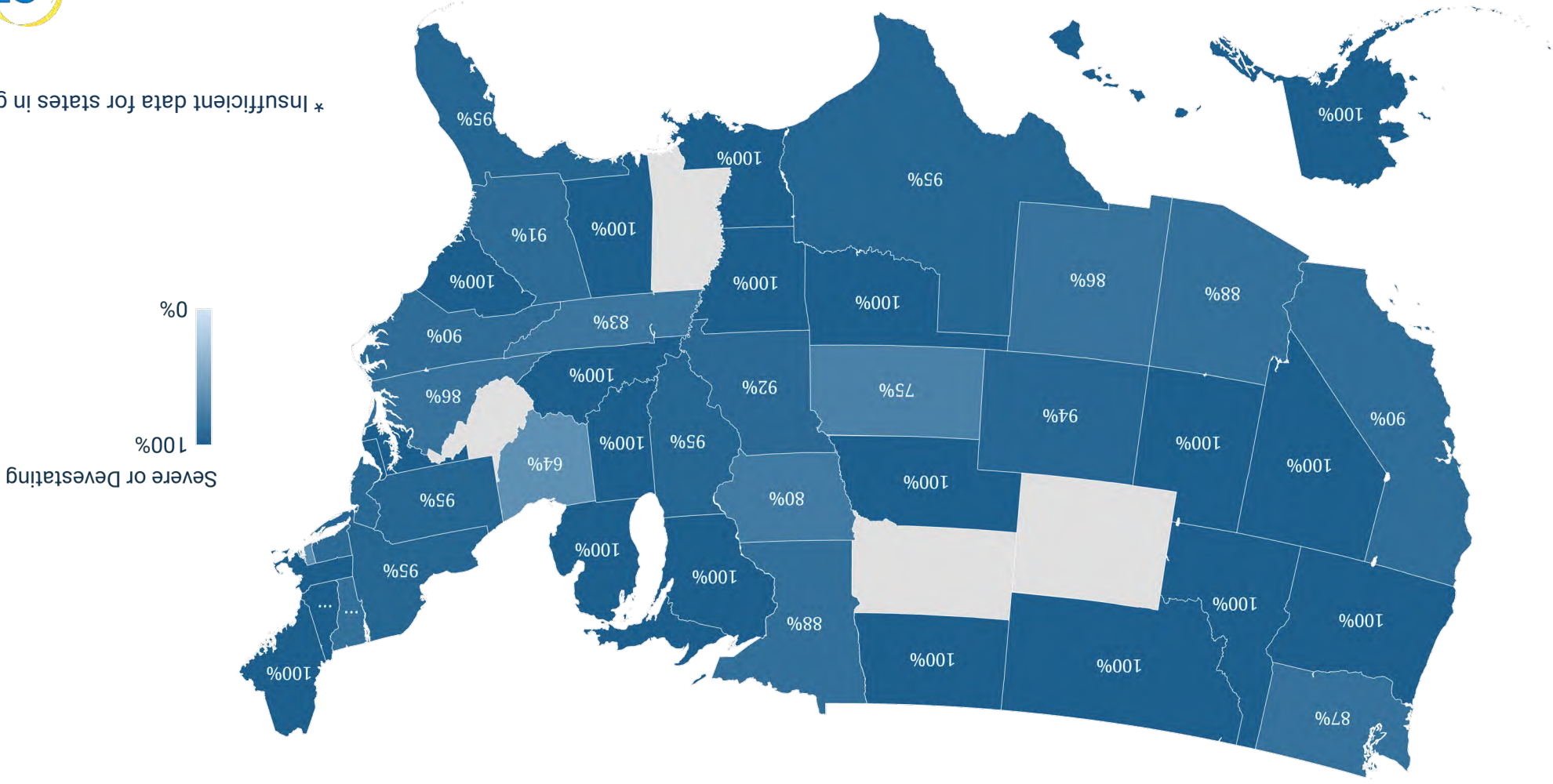
Auxin Petition Impact on U.S. Solar and Storage Industries



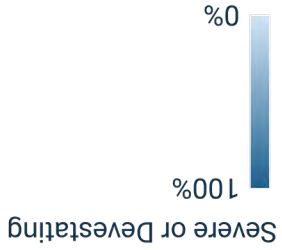
## Massive impact on solar *and* energy storage industries

Most energy storage projects are paired with solar. Without the solar components, the energy storage components are likely to become uneconomical. Putting aside the economics, moving forward would require renegotiation of all project financing agreements.

# Percent reporting "severe" or "devastating" negative impact to solar business from Department of Commerce action on solar imports

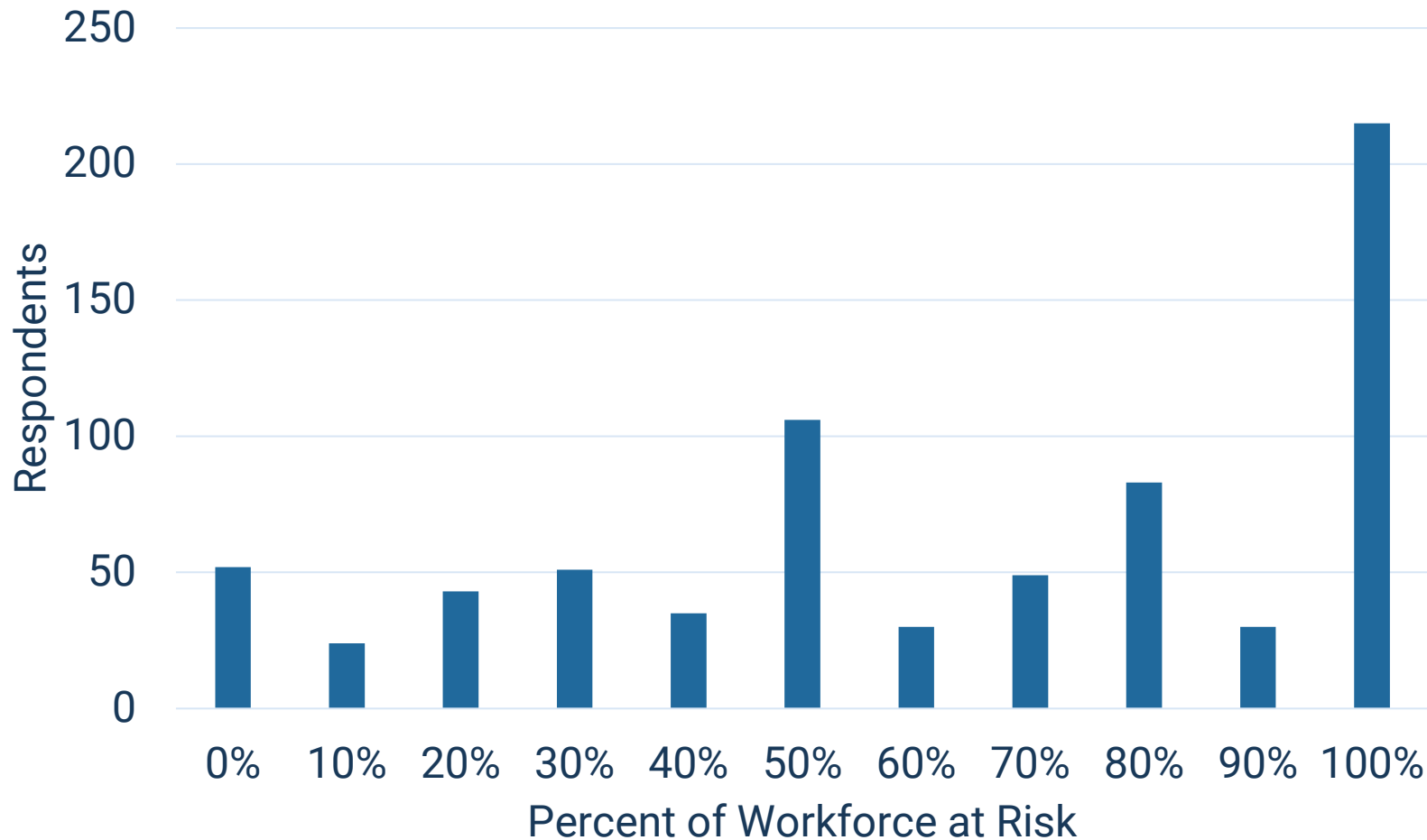


\* Insufficient data for states in grey.



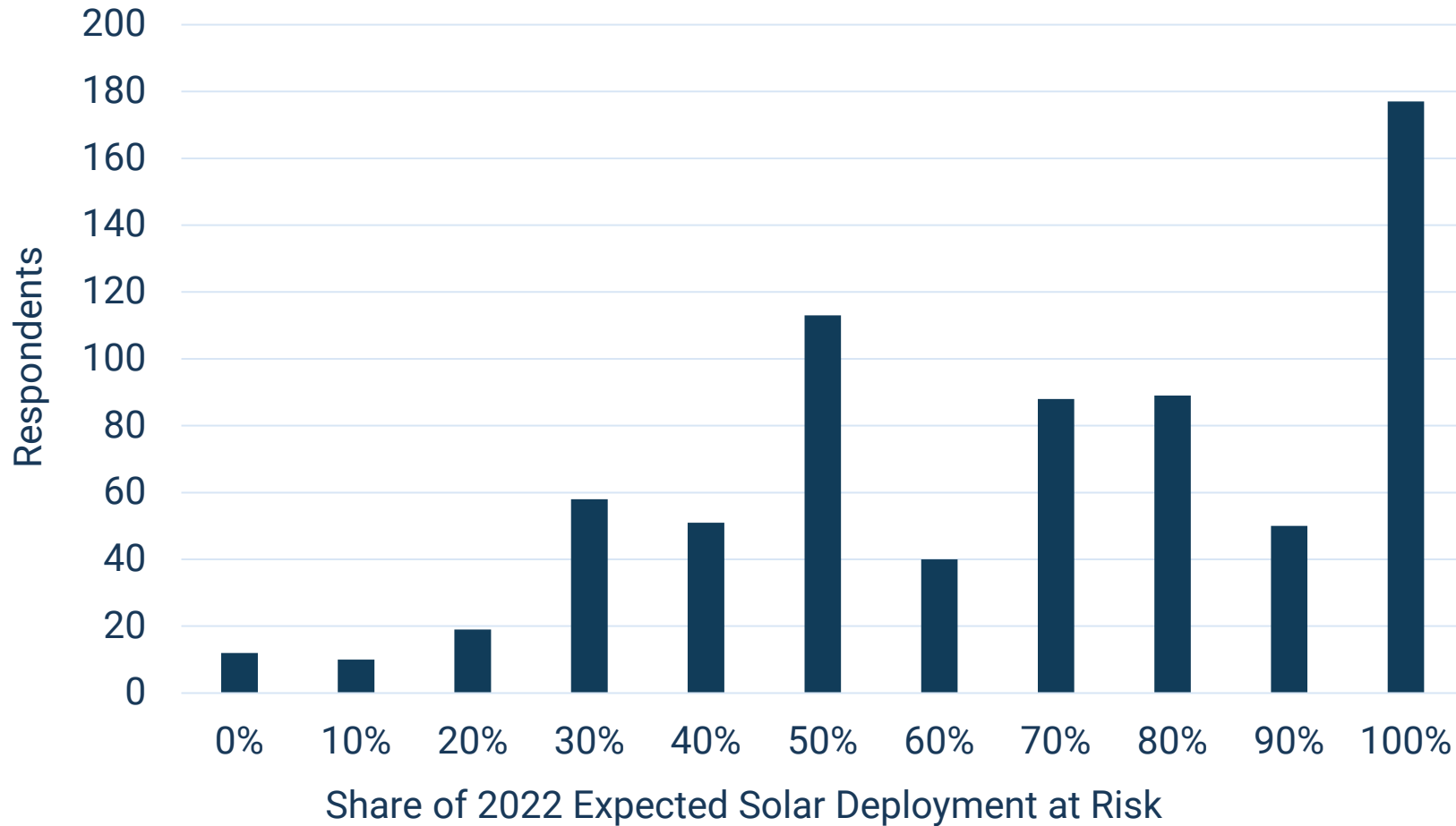


# What percent of your company's U.S. solar and storage workforce is at risk due to this tariff investigation?



- 70% of respondents report that **at least half** of their **solar and storage workforce** is at risk
- Over 200 respondents, report that **their entire solar and storage workforce** is at risk

# What percent of that business volume is now at risk?



**4/5 of respondents** report at least **half** of their current-year **solar pipeline at risk**.

Many report larger risk to their 2023 pipeline.



# Utility-Scale Project Impacts

Data as of 4/21/2022

*318 specific projects in 39 states identified based on voluntary reporting*

# Utility-Scale Project Developers Reporting Massive Disruption



## Projects reporting:

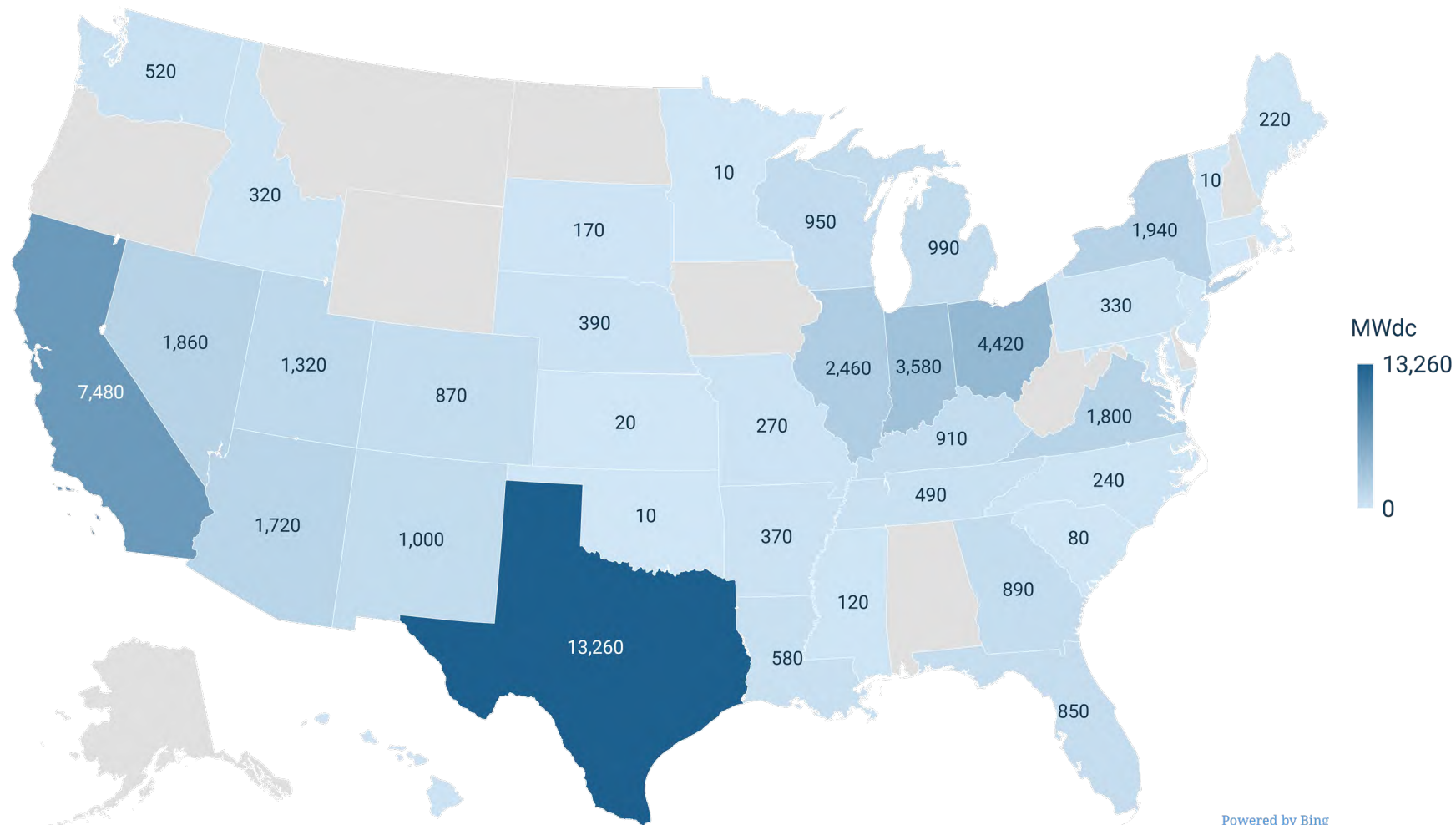
- Delays
- **Layoffs**
- Hiring freezes
- Massive cost increases (often untenable)
- **Project cancelations**
- **Projects with complete racking but no modules**
- Projects with only some of the modules needed to finish
- **Extreme uncertainty**
- **New project development on hold**



## Blurry distinction between delayed and canceled:

- Developers don't know when they might be able to get modules and some delays may drag on to the point of project failure.
- Projects pushed to later years eat into what is possible from new projects.
- Brain drain from industry as those laid off seek employment elsewhere, abandoning project development potential.

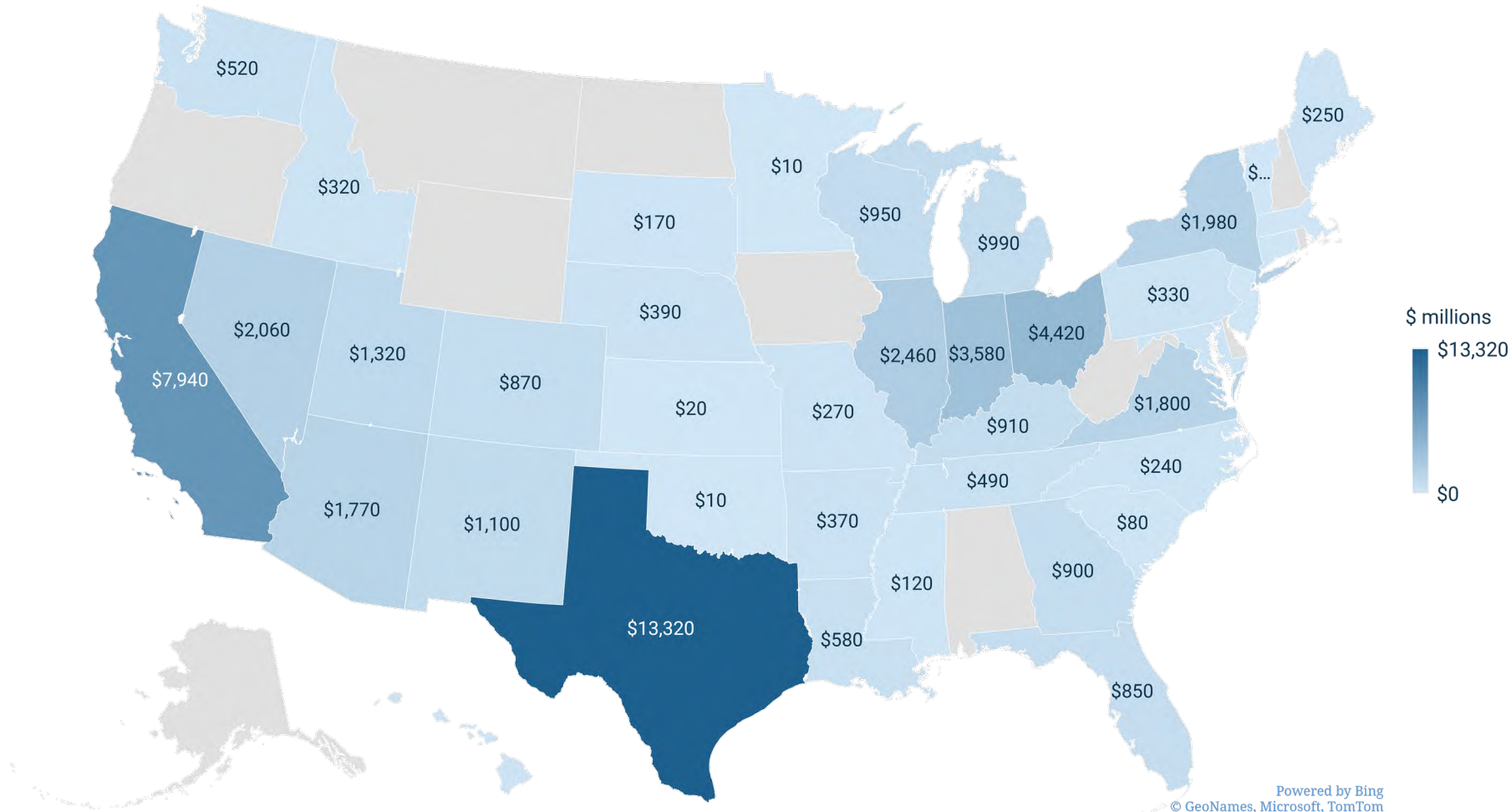
# Currently Reported Impacts (Canceled or Delayed) on Utility-Scale Solar Projects: Solar Capacity Impacted (Megawatts-direct current, MWdc)



- 318 projects
- 50,800 MWdc of solar
- 5,800 MWh of attached battery storage
- Represents only a fraction of likely impacts.

\*State figures rounded to 10 MWdc to help ensure anonymity.

# Currently Reported Impacts on Utility-Scale Solar Projects: Solar and Storage Investment at Risk (\$ millions)

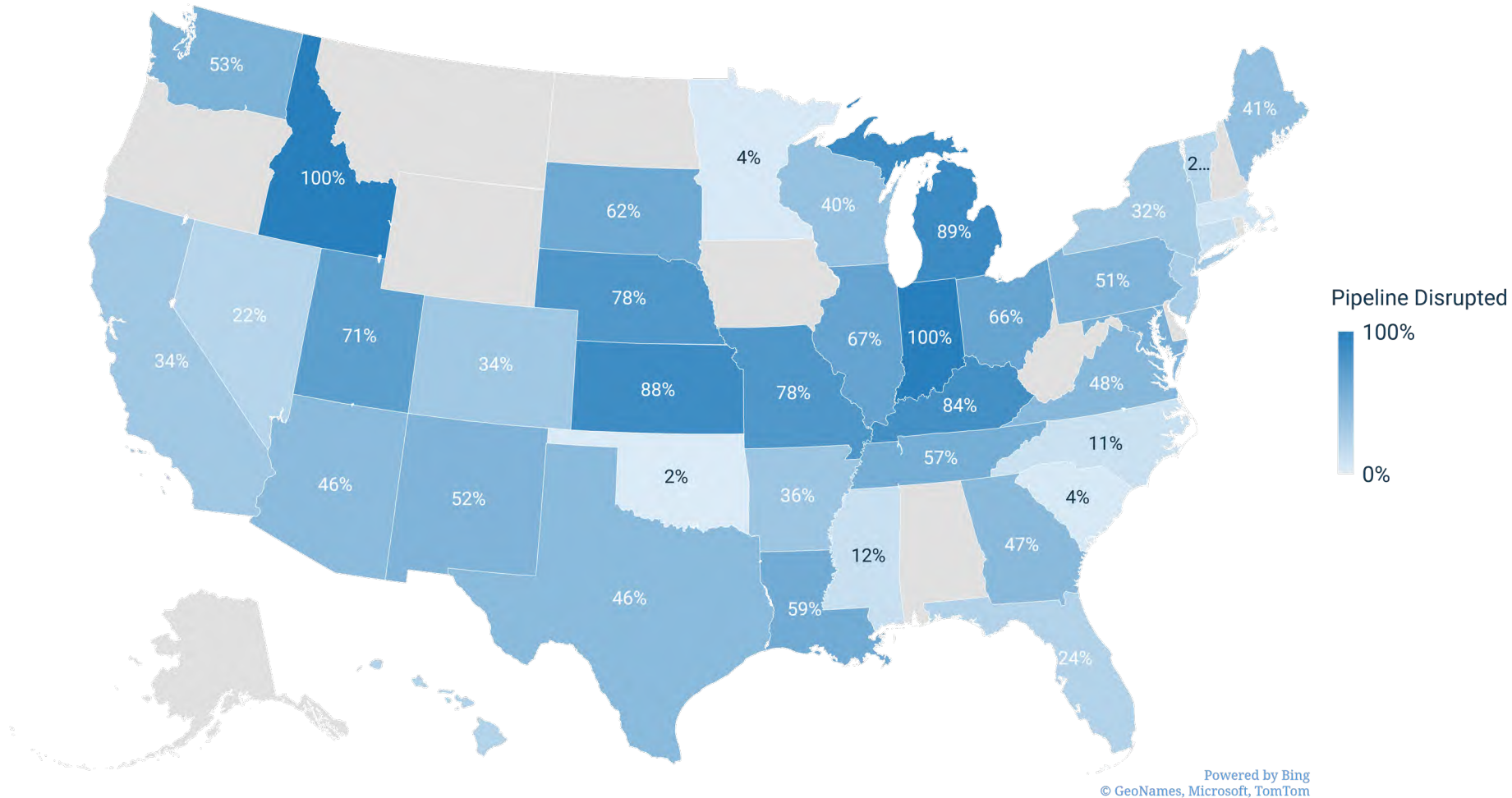


- \$52 billion utility-scale investment at risk
- 318 projects
- 50,800 MWdc of solar
- 5,800 MWh of attached battery storage
- Represents only a fraction of likely impacts.

\*State figures rounded to \$10 million to help ensure anonymity.

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# 42% of Known Utility-Scale Solar Pipeline Disrupted



- 318 projects
- 50,800 MWdc of solar
  - 122,000 MWdc known pipeline
- 5,800 MWh of attached battery storage
- Represents only a fraction of likely impacts.

\*State figures rounded to 10 MWdc to help ensure anonymity.

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# Deployment, Employment and Climate



# Baseline and Auxin Tariffs

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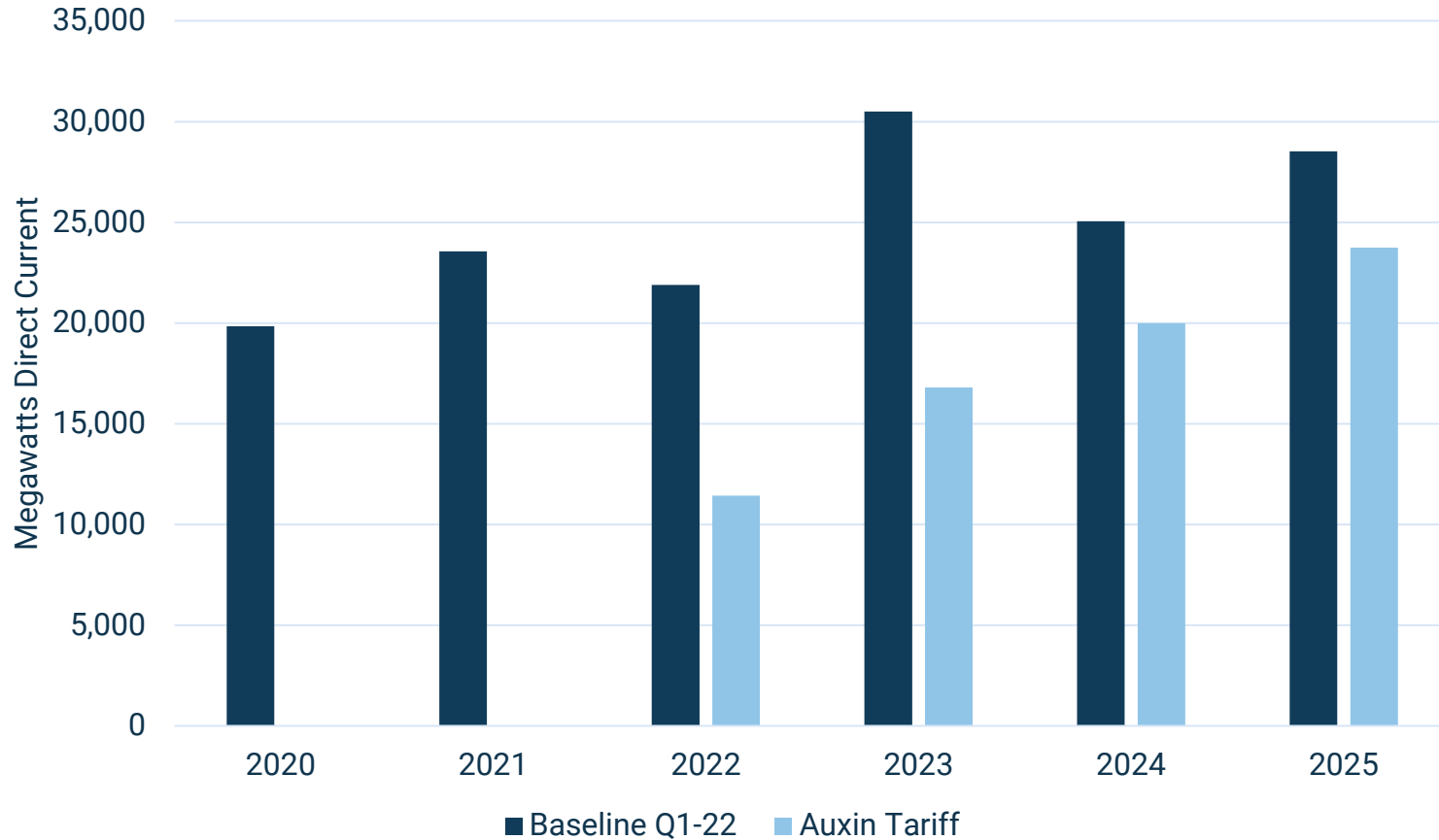
## Baseline Q1-22 Scenario

- Prior to the initiation of the Auxin proceeding, Wood Mackenzie Power and Renewables produced a baseline forecast for annual solar deployment in the U.S.
- This forecast was published in the U.S. Solar Market Insight 2021 Year in Review report in early March 2022.
- As part of this baseline, deployment was expected to dip by 7% due to supply chain issues exacerbated by a previously rejected anticircumvention petition.
- Further, the baseline accounts for the expected expiration of the federal solar investment tax credit in 2024 under current law.

## Auxin Tariffs/Auxin Effect Scenario

- This scenario restricts supply to existing manufacturing capacity available to serve the U.S. market without the potential for massive tariffs resulting from the Auxin petition. Only China has sufficient existing manufacturing capacity to replace lost supply from southeast Asia but imports from China are subject to high and uncertain AD/CVD tariffs *and* section 301 tariffs making them largely untenable.
- New factories take years to site, permit, construct and ramp. This scenario accounts for previously planned manufacturing capacity expansions outside of Cambodia, Malaysia, Thailand and Vietnam. That capacity will be insufficient to meet baseline U.S. demand for the next several years.

## Annual Solar Deployment



We can expect forecasted installations to be cut in half this year and next if tariffs are applied

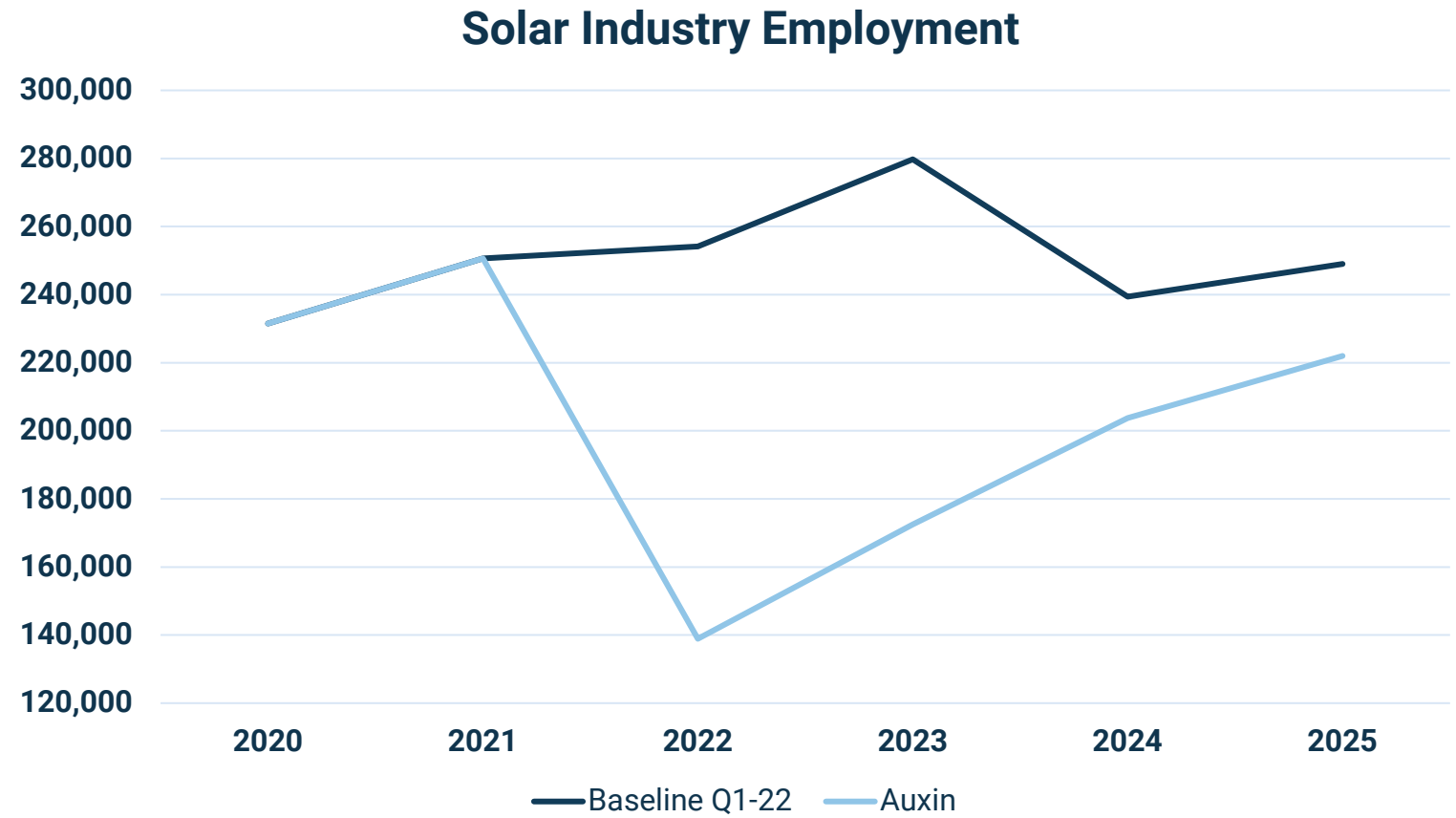
With the Auxin petition forecasted 2022 deployment will **drop 48%.**

\*Annual deployment was expected to drop in 2024 in the baseline scenario due to expiration of the federal solar investment tax credit.

**Proceeding with the Auxin petition would lead to 34 GW of lost deployment over next 4 years**

# Solar Employment Under Auxin Tariffs

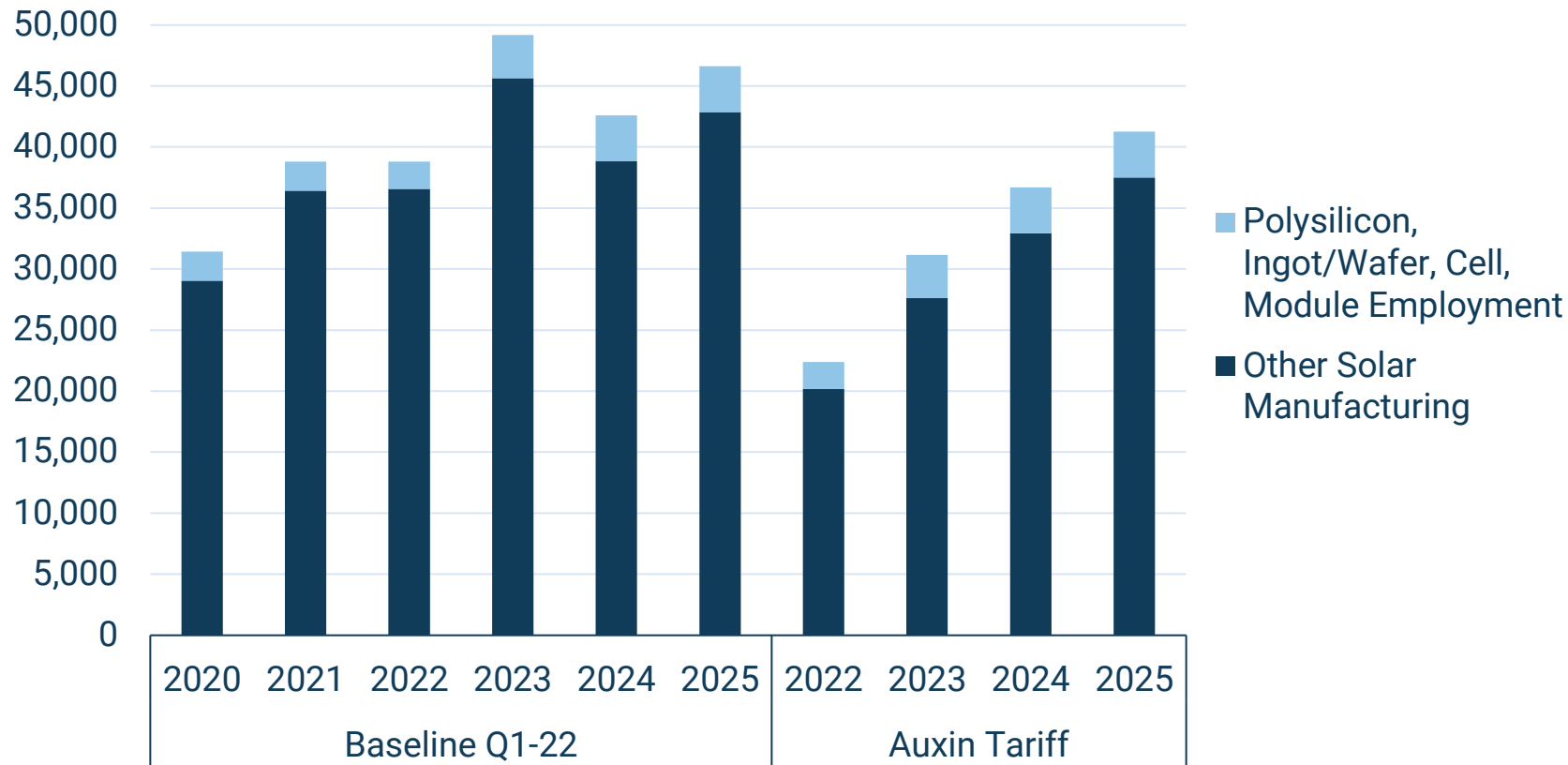
- More than **100,000 jobs** could be lost if the Auxin tariffs are imposed.
- While some of these jobs would be new jobs not added, the vast majority would be layoffs of existing workers
- **16,000–18,000 solar manufacturing jobs** would be not realized between 2022-2023 due to the imposition of tariffs, the majority of which would be layoffs.
- Roughly **31,000 were employed in solar manufacturing in 2020**, the most recent year for which survey data is available.



\*Employment was expected to drop in 2024 in the baseline scenario due to expiration of the federal solar investment tax credit.

# Auxin Tariffs Could Cost 18,000 Manufacturing Jobs

## Solar Manufacturing Employment



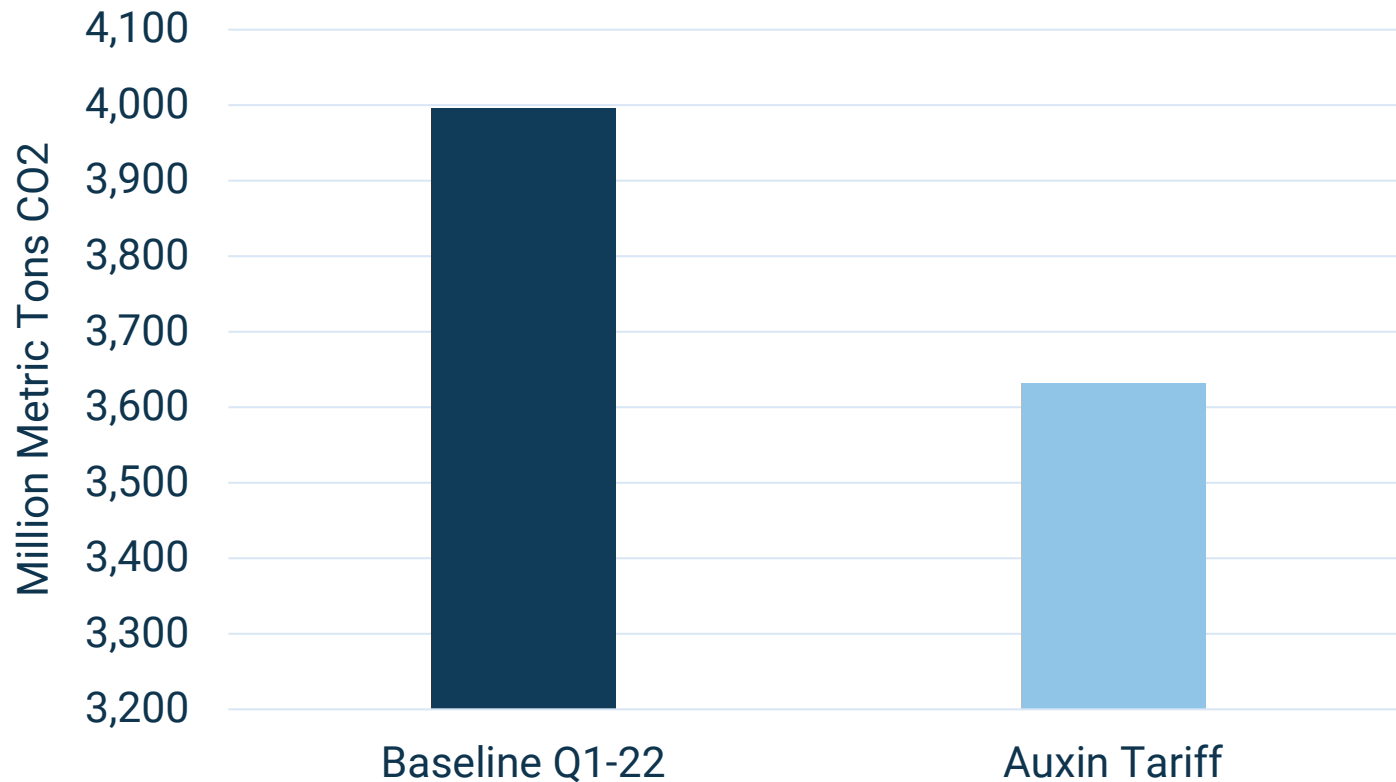
- Most solar manufacturing jobs in the U.S. are not related to module supply chain.
- Mounting, racking, trackers, and other balance of system components comprise the overwhelming majority of domestic solar manufacturing employment.

\*Employment was expected to drop in 2024 in the baseline scenario due to expiration of the federal solar investment tax credit.

# Proceeding with the Auxin petition will mean an increase of 364 million metric tons of CO<sub>2</sub>



### 2020-2035 CO2 Emissions Avoided by Solar



364 million metric tons of CO2 emissions is equivalent to the annual emissions of **97 coal plants**

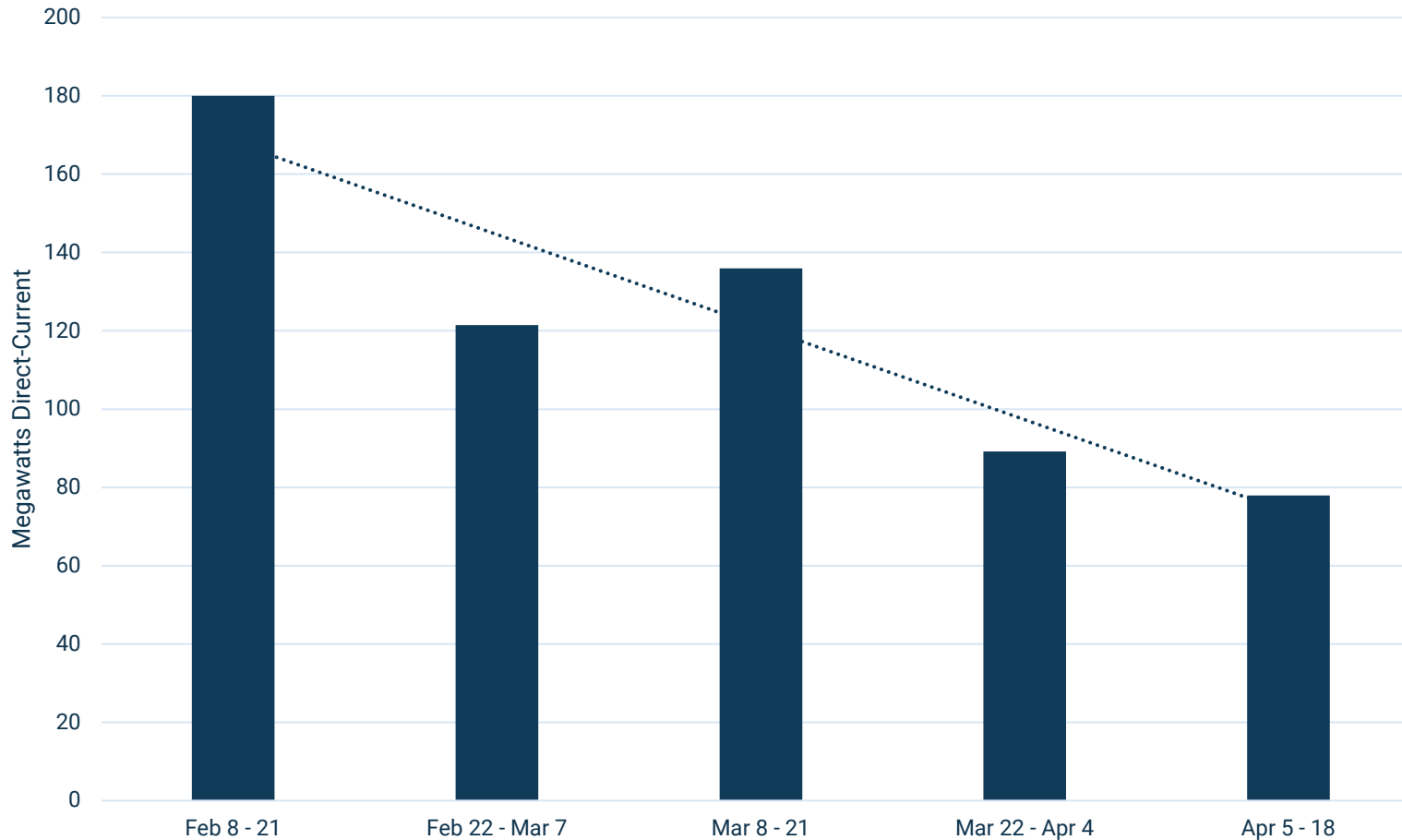
The difference between the Auxin Scenario and Biden goal is equivalent to **two full years of electricity-sector emissions**



# Additional Background

# U.S. Panel Production Threatened by Falling Cell Imports

## Weekly Crystalline Silicon Solar Cell Imports



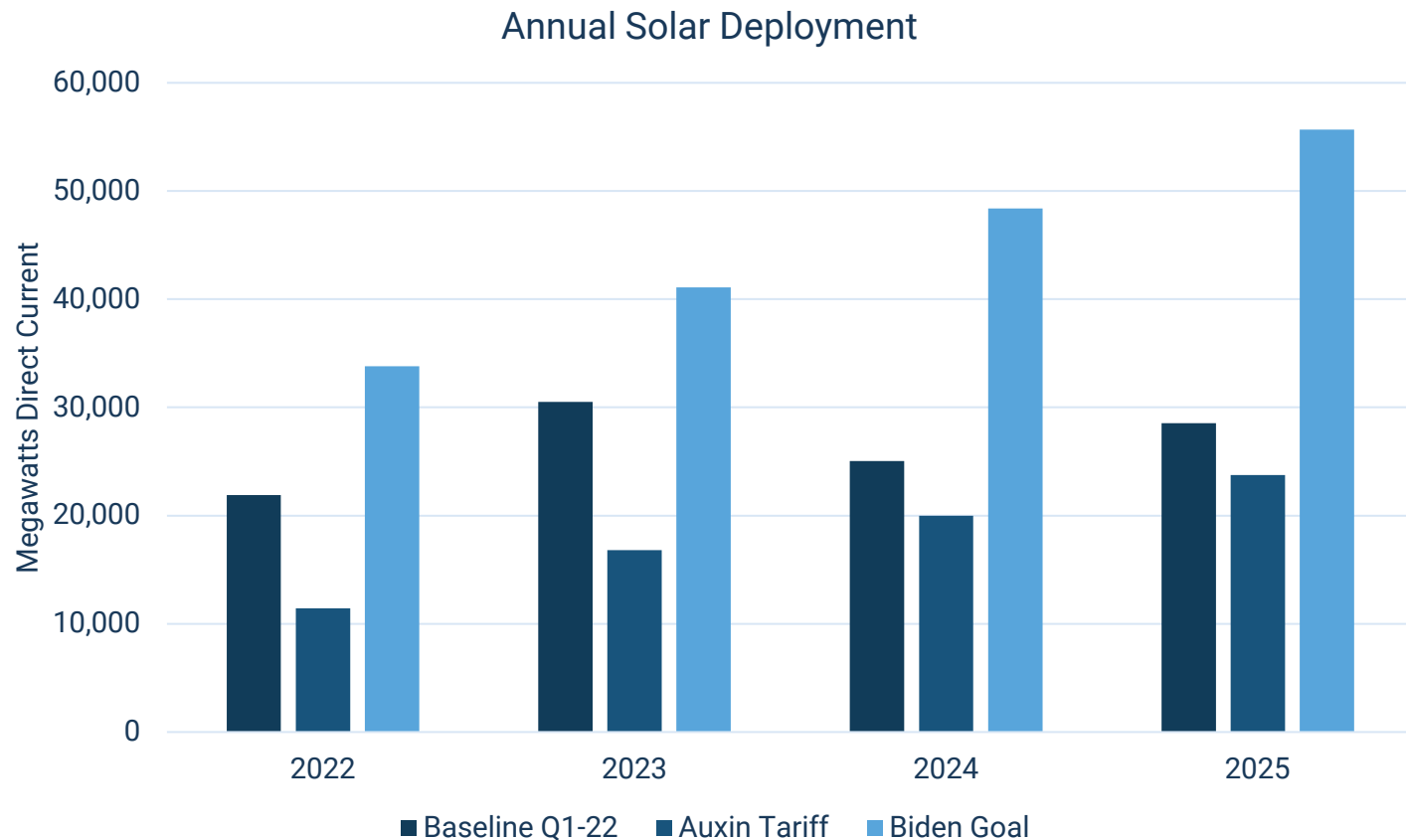
U.S. Customs and Border Protection (Corrected)

- Domestic crystalline silicon module/panel production is dependent on imported cells.
- In 2021, nearly half of all cell imports came from the four target countries.
- Cell imports have fallen since the Department of Commerce initiated its anticircumvention proceeding.
- Solar Cell imports have dropped from a 4-week moving average of 75 MW on March 7<sup>th</sup> to 42 MW on April 18<sup>th</sup>.
- This is despite a cell quota that doubled from 2.5 GW in 2021 to 5 GW this year.

# More Aggressive Growth Needed to Reach Climate Goals



## U.S. Solar Market Forecasts Under Various Policy Scenarios & Goals



The baseline forecast is now scrapped and the prospect of achieving climate goals grows dimmer each day this investigation continues.

\*Annual deployment was expected to drop in 2024 in the baseline scenario due to expiration of the federal solar investment tax credit.



# Bringing Supply Chain to the U.S. Would Take Years

---

- Even siting and permitting a U.S. plant could take a year or more.
  - Construction and production ramp could take an additional 2-3 years.
- Interim devastation to the downstream industry would reduce the domestic customer base for prospective domestic manufactures.
  - As experienced workforce leaves the industry, recovery could take years.
- Without manufacturing incentives and the right policy environment, these tariffs (like tariffs before them) are not enough to draw billions of investment in new domestic manufacturing. It is simply still too risky for many manufacturers.





Take SEIA's market impact survey:

[seia.org/AuxinImpacts](https://seia.org/AuxinImpacts)

# Submit Data on Impacts from the Auxin Tariff Petition

[Complete the Survey](#)

## For anyone engaged in the U.S. solar or storage industries

Companies of all sizes, including those that work on everything from residential to utility-scale projects, should complete this form to provide a holistic and qualitative sense of how they expect the anti-circumvention investigation to impact their businesses and workforce.

#1



## For those with project-level impact data

Project-level data for large projects will be extremely valuable to show policymakers detailed and concrete impacts of the anti-circumvention investigation. In addition to completing the general survey above, those with information about specific large-scale solar projects can use a map tool to find their projects and submit basic information about the impacts from the Auxin petition.

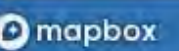
#2



Large projects



1. Find your projects on the map





2. Confirm it's the right project by looking at details in popup window

3. Click on link to open a survey with details shown prefilled

Project Name and project ID (if applicable). \*  
Note this information will be auto-populated if you opened this survey from the survey map.

Angel Fire Energy Facility (64695)

Project State \*  
Note this information will be auto-populated if you opened this survey from the survey map.

NM

Project County  
Note this information will be auto-populated if you opened this survey from the survey map.

Colfax

**Prefilled data allows alignment with other databases**

# Submit Data on Impacts from the Auxin Tariff Petition



[Complete the Survey](#)

## For impacts to solar projects 1 megawatt (MW) and above:

Project-level data for large projects will be extremely valuable to show policymakers detailed and concrete impacts of the anti-circumvention investigation. All these projects must report delays and cancellations to the Energy Information Administration (EIA) via monthly Form 860m filings. While the data becomes public 2+ months after the forms are filed, we need the data ASAP to fight this existential threat. In addition to completing the general survey above, we have two asks for you:

### 1. Submit data on impacts to the large solar projects in your portfolio

## Submit Project-level Data

-  Find Your Project & Submit Data
-  **Submit Project-level Data Manually**

**If you don't see your project on the map**

# Ensure EIA Receives Accurate Project Updates

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- The Energy Information Administration (EIA) is the source of official government statistics on energy.
- Projects larger than 1 MWac submit EIA form 860 annually and EIA form 860m monthly if they are within 12 months of beginning construction.
- Find the person responsible for submitting these forms for your projects (often developer or owner).
  - Make sure the person is fully aware of supply chain challenges ASAP.
  - Forms typically submitted within two weeks of the close of a month.
- This data is on a two-month delay so make sure March 2022 submissions reflect the current situation.
- Still complete the SEIA survey so we can get the data faster!





**Big Rivers Electric Corporation**  
**Case No. 2022-00296**

<b>Project</b>	<b>Value of PPA</b>	
	<b>Base</b>	<b>Scenario</b>
Unbridled		
Meade		
McCracken		
<b><i>Total</i></b>		

"Base" figures were calculated in Exhibit Eacret-15 in CN 2020-00183

"Scenario" figures assumed ELCC and lower capacity prices as well as a lower REC price

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

	2023	2024	2025	2026	2027	2028
Geronimo Unbridled Price		\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10
MWh						
PPA Expense						
Energy Value						
IndyHub ATC Forward Curve						
Generation-Weighted Adjustment						
BREC.BREC Adjustment						
Adjusted Energy Price						
Total Energy Value						
Capacity Value						
ZRC Adjustment Factors						
ELCC						
Henderson Year 2		160				
Capacity Forward Curve per kw-month						
Total Capacity Value						

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

	2029	2030	2031	2032	2033	2034
Geronimo Unbridled						
Price	\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10
MWh	[REDACTED]					
PPA Expense	[REDACTED]					
Energy Value	[REDACTED]					
IndyHub ATC Forward Curve	[REDACTED]					
Generation-Weighted Adjustment	[REDACTED]					
BREC.BREC Adjustment	[REDACTED]					
Adjusted Energy Price	[REDACTED]					
Total Energy Value	[REDACTED]					
Capacity Value	[REDACTED]					
ZRC Adjustment Factors	[REDACTED]					
ELCC	[REDACTED]					
Henderson Year 2	160	[REDACTED]				
Capacity Forward Curve per kw-month	[REDACTED]					
Total Capacity Value	[REDACTED]					

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

	2035	2036	2037	2038	2039
Geronimo Unbridled Price	\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10
MWh					
PPA Expense					
Energy Value					
IndyHub ATC Forward Curve					
Generation-Weighted Adjustment					
BREC.BREC Adjustment					
Adjusted Energy Price					
Total Energy Value					
Capacity Value					
ZRC Adjustment Factors					
ELCC					
Henderson Year 2	160				
Capacity Forward Curve per kw-month					
Total Capacity Value					

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

	2040	2041	2042	2043	2044
Gerónimo Unbridled Price	\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10	\$ 38.10
MWh					
PPA Expense					
Energy Value					
IndyHub ATC Forward Curve					
Generation-Weighted Adjustment					
BREC.BREC Adjustment					
Adjusted Energy Price					
Total Energy Value					
Capacity Value					
ZRC Adjustment Factors					
ELCC					
Henderson Year 2	160				
Capacity Forward Curve per kw-month					
Total Capacity Value					

**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Amended PPA  
September 13, 2022**

	2023	2024	2025	2026	2027	2028
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Renewable Energy Credit Value  
Green-E RECS  
REC Value

Total Value

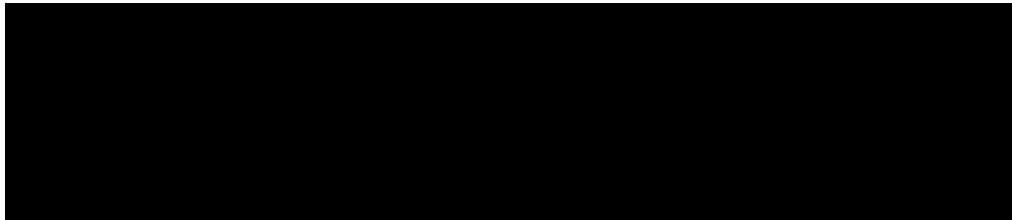
Total Value less Cost  
Adjustment for Nucor Portion  
Nucor-Adjusted Total

Present Value at 5%

Potential Reductions in Value

Forward Curve \$/kw-month

Alternative Capacity Value  
Reduction from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Amended PPA  
September 13, 2022**

	2029	2030	2031	2032	2033	2034
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Renewable Energy Credit Value  
Green-E RECS  
REC Value

Total Value

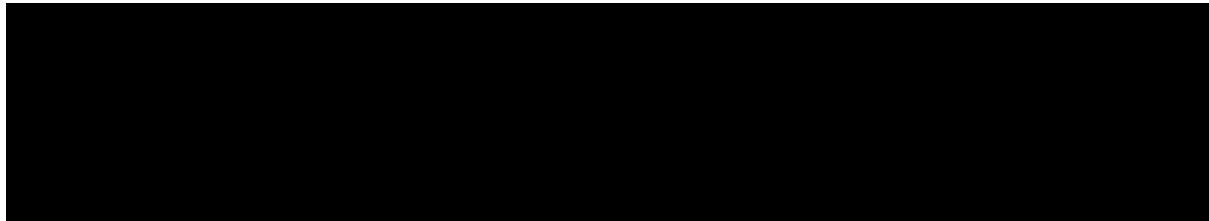
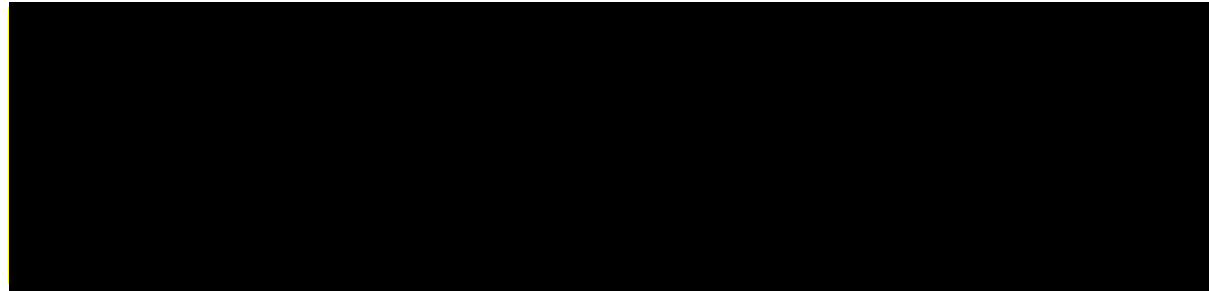
Total Value less Cost  
Adjustment for Nucor Portion  
Nucor-Adjusted Total

Present Value at 5%

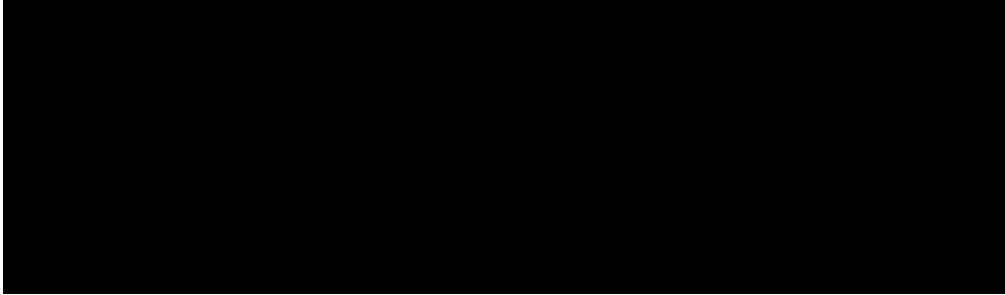
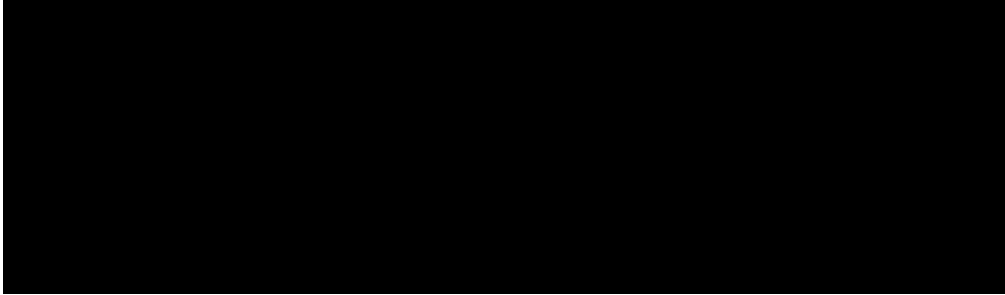
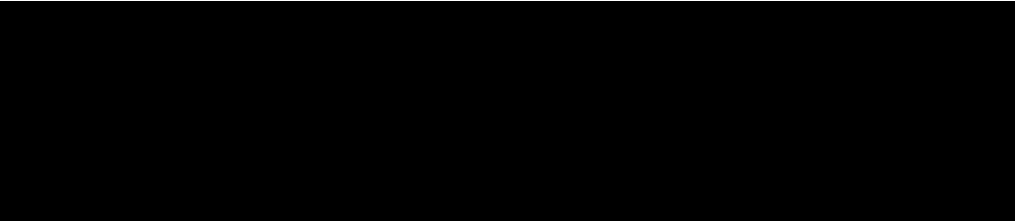
Potential Reductions in Value

Forward Curve \$/kw-month

Alternative Capacity Value  
Reduction from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

	2035	2036	2037	2038	2039
Renewable Energy Credit Value					
Green-E RECS					
REC Value					
Total Value					
Total Value less Cost					
Adjustment for Nucor Portion					
Nucor-Adjusted Total					
Present Value at 5%					
Potential Reductions in Value					
Forward Curve \$/kw-month					
Alternative Capacity Value					
Reduction from Base Assumption					
Adjustment for Nucor Portion					
Nucor-Adjusted Total					



**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

	2040	2041	2042	2043	2044
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Renewable Energy Credit Value  
Green-E RECS  
REC Value

Total Value

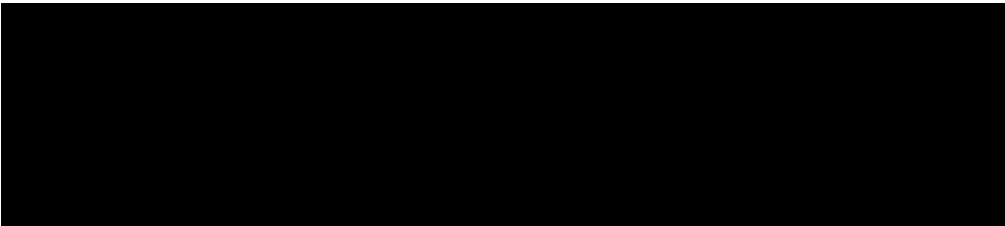
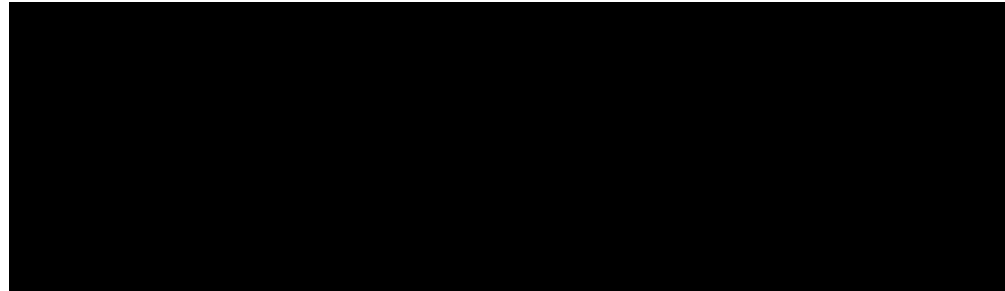
Total Value less Cost  
Adjustment for Nucor Portion  
Nucor-Adjusted Total

Present Value at 5%

Potential Reductions in Value

Forward Curve \$/kw-month

Alternative Capacity Value  
Reduction from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



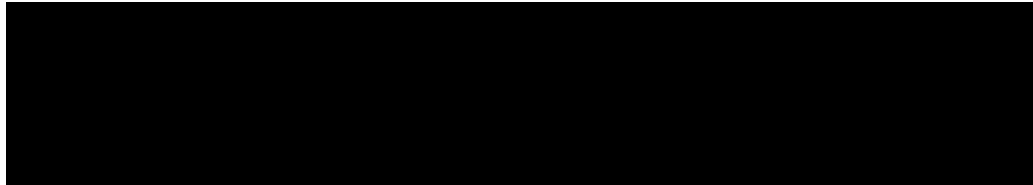
**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

2023	2024	2025	2026	2027	2028
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Present Value of Reduction at 5%

Ohio Solar Curve  
Alternative REC Value  
Change from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total

\$ -



Present Value of Scenario Changes at 5%



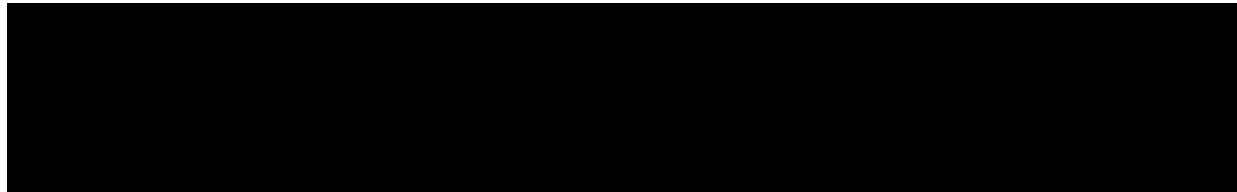
	Present Value of Benefit	Network Upgrade Costs	Net
Base Benefit Lower Capacity and RECs			

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

2029	2030	2031	2032	2033	2034
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Present Value of Reduction at 5%

Ohio Solar Curve  
Alternative REC Value  
Change from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



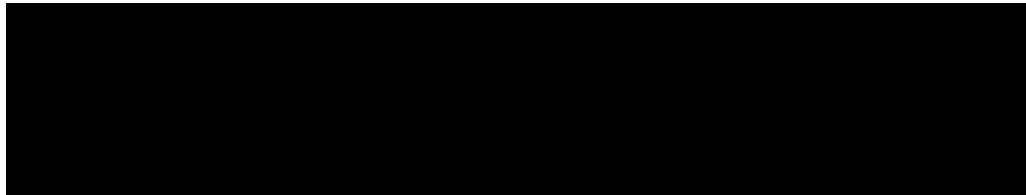
Present Value of Scenario Changes at 5%

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

2035	2036	2037	2038	2039
------	------	------	------	------

Present Value of Reduction at 5%

Ohio Solar Curve  
Alternative REC Value  
Change from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



Present Value of Scenario Changes at 5%

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Amended PPA**  
**September 13, 2022**

2040	2041	2042	2043	2044
------	------	------	------	------

Present Value of Reduction at 5%

Ohio Solar Curve  
Alternative REC Value  
Change from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



Present Value of Scenario Changes at 5%

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**

**COMPARISON OF VALUE CALCULATIONS**

	<b>Original Terms June 18, 2020</b>	<b>Amended Terms Sept. 13, 2022</b>	<b>Difference</b>	<b>Adjusted for Time Value</b>
Value of Energy				
Value of Capacity				
Value of REC's*				
Value to Nucor				
Total Value				
Cost				
Network Upgrades	500,000	5,000,000	4,500,000	4,448,750
Total Cost				
Net Value				

*\*Renewable Energy Certificates*

- Notes: (1) The Original NPV was in 2020 \$  
(2) The Amended NPV is in 2022 \$  
(3) The Capacity market price is higher, but the ELCC rules reduce the quantity of capacity resulting in a lower "Value of Capacity"

**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

	2023	2024	2025	2026	2027	2028
Geronimo Unbridled Price		\$ 29.60	\$ 29.60	\$ 29.60	\$ 29.60	\$ 29.60
MWh						
PPA Expense						
Energy Value						
IndyHub ATC Forward Curve						
Generation-Weighted Adjustment						
BREC.BREC Adjustment						
Adjusted Energy Price						
Total Energy Value						
Capacity Value						
ZRC Adjustment Factors						
ELCC						
Henderson Year 2		160				
Capacity Forward Curve per kw-month						
Total Capacity Value						

**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

	2029	2030	2031	2032	2033	2034
Geronimo Unbridled Price	\$ 29.60	\$ 29.60	\$ 29.60	\$ 29.60	\$ 29.60	\$ 29.60
MWh						
PPA Expense						
Energy Value						
IndyHub ATC Forward Curve						
Generation-Weighted Adjustment						
BREC.BREC Adjustment						
Adjusted Energy Price						
Total Energy Value						
Capacity Value						
ZRC Adjustment Factors						
ELCC						
Henderson Year 2	160					
Capacity Forward Curve per kw-month						
Total Capacity Value						



**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

	2035	2036	2037	2038	2039
Geronimo Unbridled Price	\$ 29.60	\$ 29.60	\$ 29.60	\$ 29.60	\$ 29.60
MWh					
PPA Expense					
Energy Value					
IndyHub ATC Forward Curve					
Generation-Weighted Adjustment					
BREC.BREC Adjustment					
Adjusted Energy Price					
Total Energy Value					
Capacity Value					
ZRC Adjustment Factors					
ELCC					
Henderson Year 2	160				
Capacity Forward Curve per kw-month					
Total Capacity Value					

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Original PPA**  
**with Updated Market Assumptions**  
**September 13, 2022**

	2040	2041	2042	2043	2044
Geronimo Unbridled Price	\$ 29.60	\$ 29.60	\$ 29.60	\$ 29.60	\$ 38.10
MWh					
PPA Expense					
Energy Value					
IndyHub ATC Forward Curve					
Generation-Weighted Adjustment					
BREC.BREC Adjustment					
Adjusted Energy Price					
Total Energy Value					
Capacity Value					
ZRC Adjustment Factors					
ELCC					
Henderson Year 2	160				
Capacity Forward Curve per kw-month					
Total Capacity Value					

**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

	2023	2024	2025	2026	2027	2028
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Renewable Energy Credit Value  
Green-E RECS  
REC Value

Total Value

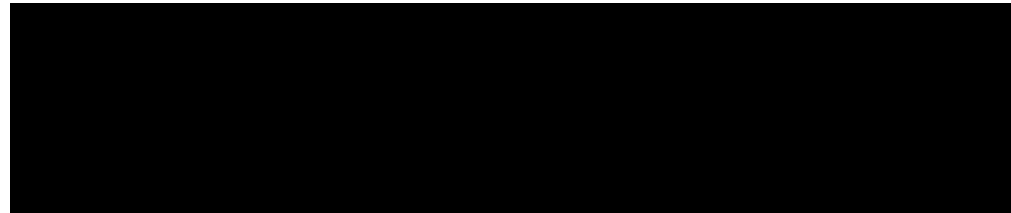
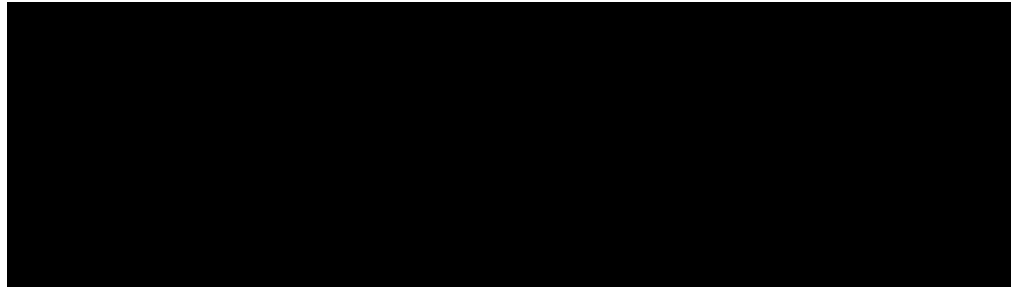
Total Value less Cost  
Adjustment for Nucor Portion  
Nucor-Adjusted Total

Present Value at 5%

Potential Reductions in Value

Forward Curve \$/kw-month

Alternative Capacity Value  
Reduction from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

2029	2030	2031	2032	2033	2034
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Renewable Energy Credit Value  
Green-E RECS  
REC Value

Total Value

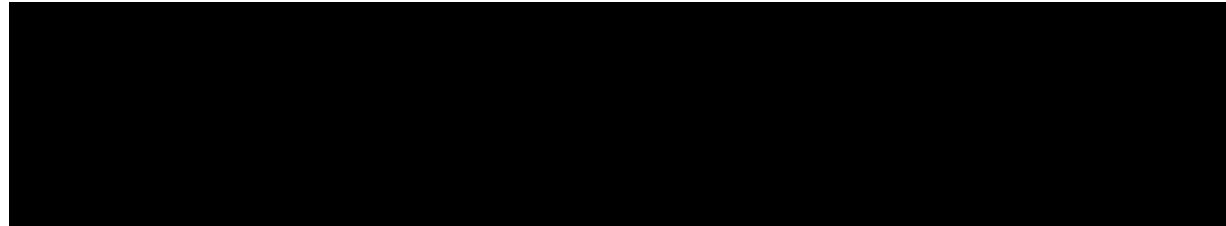
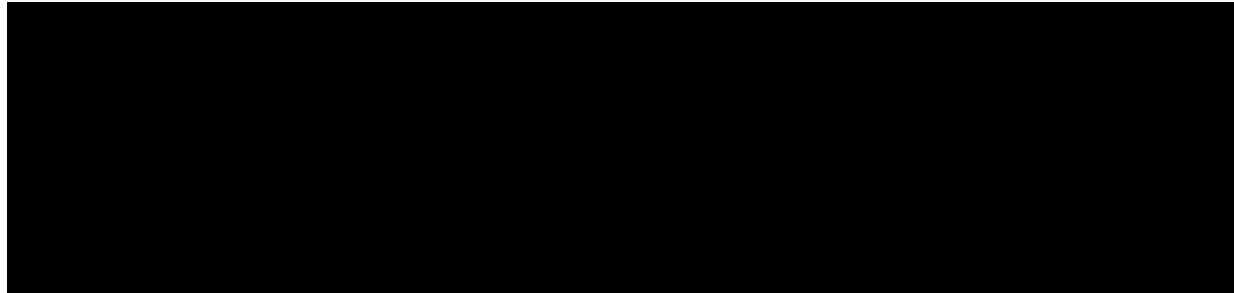
Total Value less Cost  
Adjustment for Nucor Portion  
Nucor-Adjusted Total

Present Value at 5%

Potential Reductions in Value

Forward Curve \$/kw-month

Alternative Capacity Value  
Reduction from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

	2035	2036	2037	2038	2039
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Renewable Energy Credit Value  
Green-E RECS  
REC Value

Total Value

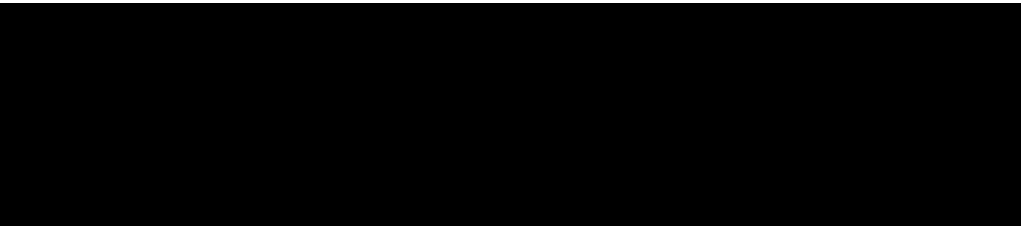
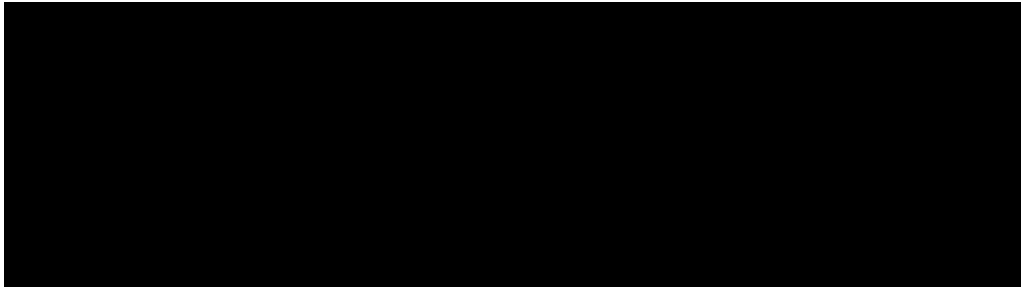
Total Value less Cost  
Adjustment for Nucor Portion  
Nucor-Adjusted Total

Present Value at 5%

Potential Reductions in Value

Forward Curve \$/kw-month

Alternative Capacity Value  
Reduction from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

	2040	2041	2042	2043	2044
--	------	------	------	------	------

Renewable Energy Credit Value  
Green-E RECS  
REC Value

Total Value

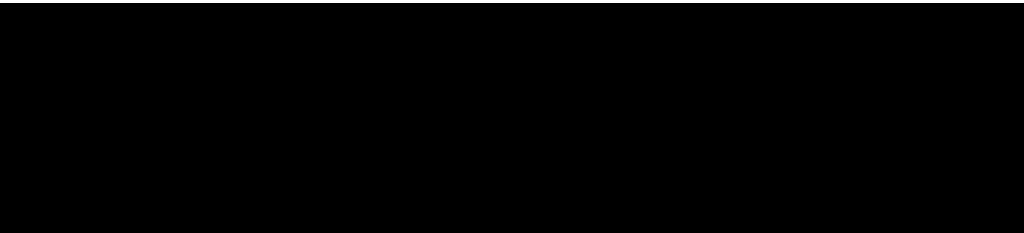
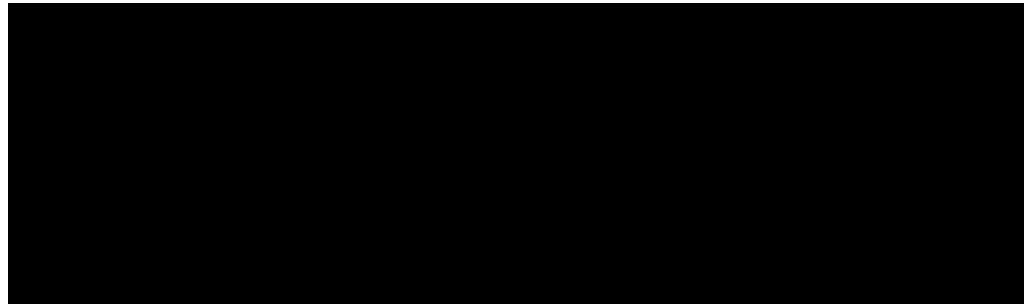
Total Value less Cost  
Adjustment for Nucor Portion  
Nucor-Adjusted Total

Present Value at 5%

Potential Reductions in Value

Forward Curve \$/kw-month

Alternative Capacity Value  
Reduction from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

2023	2024	2025	2026	2027	2028
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Present Value of Reduction at 5%

Ohio Solar Curve

Alternative REC Value

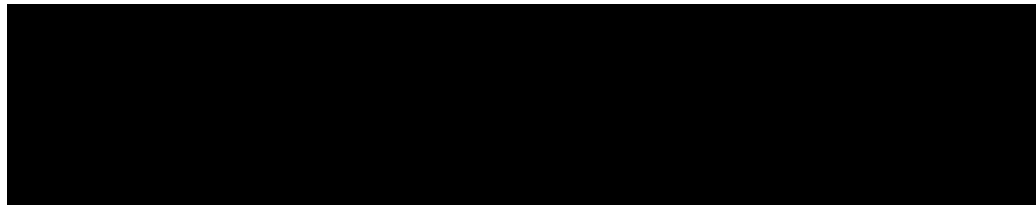
Change from Base Assumption

Adjustment for Nucor Portion

Nucor-Adjusted Total

\$

-



Present Value of Scenario Changes at 5%

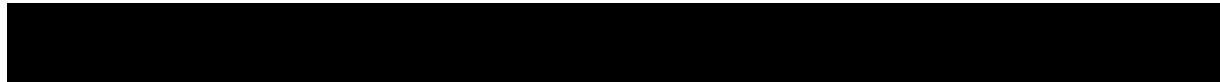


Present Value  
of Benefit

Network  
Upgrade  
Costs\*

Net

Base Benefit  
Lower Capacity  
and RECs

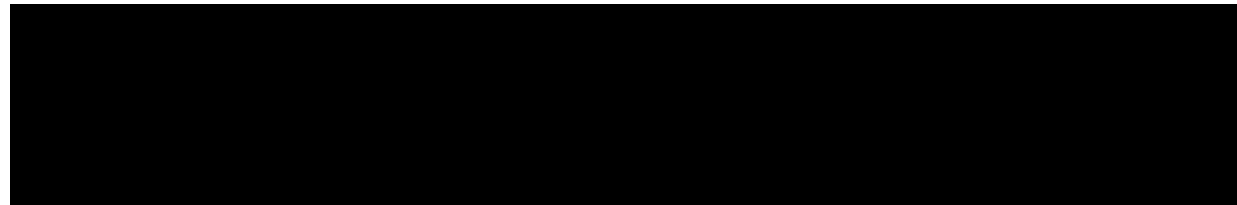


**Big Rivers Electric Corporation  
Case No. 2022-00296  
Calculation of Benefits of Original PPA  
with Updated Market Assumptions  
September 13, 2022**

2029	2030	2031	2032	2033	2034
------	------	------	------	------	------

Present Value of Reduction at 5%

Ohio Solar Curve  
Alternative REC Value  
Change from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



Present Value of Scenario Changes at 5%

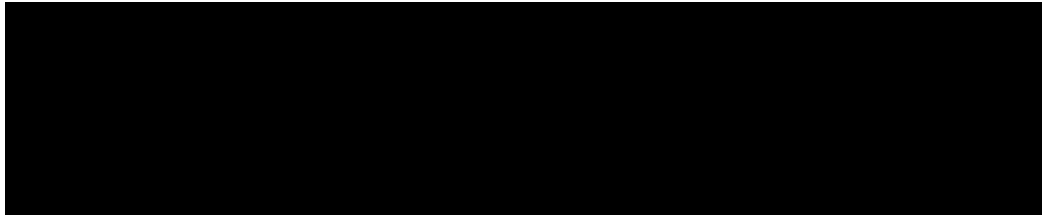


**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Original PPA**  
**with Updated Market Assumptions**  
**September 13, 2022**

2035	2036	2037	2038	2039
------	------	------	------	------

Present Value of Reduction at 5%

Ohio Solar Curve  
Alternative REC Value  
Change from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



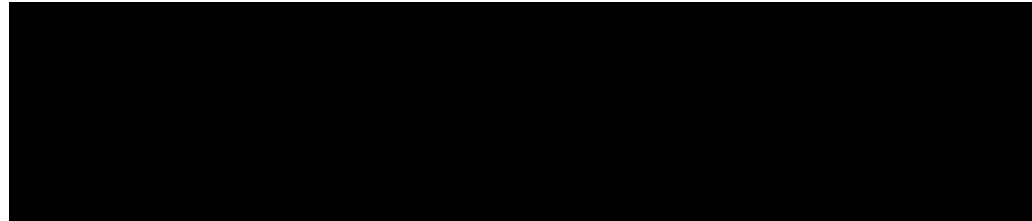
Present Value of Scenario Changes at 5%

**Big Rivers Electric Corporation**  
**Case No. 2022-00296**  
**Calculation of Benefits of Original PPA**  
**with Updated Market Assumptions**  
**September 13, 2022**

	2040	2041	2042	2043	2044
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Present Value of Reduction at 5%

Ohio Solar Curve  
Alternative REC Value  
Change from Base Assumption  
Adjustment for Nucor Portion  
Nucor-Adjusted Total



Present Value of Scenario Changes at 5%

**Big Rivers Electric Corporation**  
**Description of Property**  
**As of July 31, 2022**

1 Big Rivers Electric Corporation (“Big Rivers” or the “Corporation”) is a generation  
2 and transmission (“G&T”) cooperative headquartered in Henderson, Kentucky. The  
3 Corporation meets the electric power needs of three member distribution  
4 cooperatives, which, in turn, sell electricity to approximately 121,000 residential,  
5 commercial, and industrial consumers in 22 western Kentucky counties.

6

7 1. Big Rivers’ utility plant-in-service, materials and supplies, and fuel  
8 inventory as of July 31, 2022, consisted of intangible plant, electric power  
9 generating plants, land right-of-ways, transmission stations and lines,  
10 land, buildings, office furniture and equipment, transportation  
11 equipment, storage equipment, tools, shop and garage equipment,  
12 laboratory equipment, power operated equipment, communication  
13 equipment, materials and supplies inventory, and fuel inventory. The  
14 original cost of these properties as of July 31, 2022, was \$1,802,628,453.

15

16 2. As of July 31, 2022, Big Rivers’ intangible plant included organizational  
17 and franchise costs of \$15,066,895.

18

19 3. Big Rivers owns and operates 936 megawatts (MW) of electric generating  
20 capacity from three power stations: Robert D. Green (454 MW), Robert A.  
21 Reid CT (65 MW), and D.B. Wilson (417 MW). As of July 31, 2022, the

**Big Rivers Electric Corporation**  
**Description of Property**  
**As of July 31, 2022**

- 1 original cost of Big Rivers' generation assets was \$1,360,247,164 with a  
2 net book (*i.e.*, depreciated) value of \$479,776,796.
- 3 a. The Robert D. Green facility is a multiple unit generation plant  
4 consisting of two natural gas-fired units. The units were  
5 commercialized in 1979 and 1981, and were converted from coal-fired  
6 to natural gas in 2022. The units have a combined net output rating  
7 of 454 MW.
- 8 b. The Robert A. Reid CT is a simple cycle natural gas combustion  
9 turbine. The unit was commercialized in 1976 and has a net output  
10 rating of 65 MW.
- 11 c. The D.B. Wilson Station is a single coal-fired unit designed to burn  
12 Illinois Basin coal. The unit was commercialized in 1986 and has a  
13 net output rating of 417 MW.
- 14
- 15 4. Big Rivers has interconnections with six utilities: Southern Illinois Power  
16 Cooperative, Louisville Gas & Electric, Kentucky Utilities, CenterPoint  
17 Energy, Hoosier Energy Rural Electric Cooperative, and the Tennessee  
18 Valley Authority. However, Big Rivers currently cannot purchase power  
19 from the Tennessee Valley Authority.  
20

**Big Rivers Electric Corporation**  
**Description of Property**  
**As of July 31, 2022**

1     5.     As of July 31, 2022, Big Rivers' Transmission Facilities include land,  
2           rights-of-way, station equipment, and lines, with an original cost of  
3           \$325,424,451 and a net book (depreciated) value of \$168,460,628. The  
4           miles of transmission line by size are as follows:

5

<b>Big Rivers Electric Corporation Transmission Line Mileage by Voltage Size</b>	
<b>Voltage</b>	<b>Miles</b>
69 kV	852
138 kV	14
161 kV	366
345 kV	72

6           The substation capacity consists of 1,197,000 kVA generation plant step-  
7           up transformation and 4,415,000 VA transmission substation  
8           transformation.

9

10     6.     Big Rivers owns general plant assets costing \$61,926,998 as of July 31,  
11           2022, with a net book (depreciated) value of \$23,492,050. General plant  
12           assets consist of land, structures and improvements, office furniture and  
13           equipment, transportation equipment, storage equipment, tools, shop and  
14           garage equipment, laboratory equipment, power operated equipment,  
15           communication equipment, and other miscellaneous equipment used to  
16           provide service to member cooperatives.

**Big Rivers Electric Corporation**  
**Description of Property**  
**As of July 31, 2022**

- 1     7.     As of July 31, 2022, Big Rivers had materials and supplies inventory of  
2             \$15,850,902 and fuel inventory of \$24,112,043.  
3
- 4     8.     Big Rivers' investment in construction work in progress as of July 31,  
5             2022 was \$208,565,779.  
6
- 7     9.     As of July 31, 2022, Big Rivers did not own any non-utility property.

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

1 Big Rivers Electric Corporation (“Big Rivers”) states that:

- 2 a. No amounts or kinds of stock have been authorized.
- 3 b. No amounts or kinds of stock have been issued, and none are outstanding.
- 4 c. No amounts or kinds of preferred stock have been authorized, and none  
5 are outstanding.
- 6 d. Effective with the close of the “Unwind” Transaction on July 16, 2009, all  
7 previously existing mortgages were permanently extinguished and  
8 replaced with Big Rivers’ Mortgage Indenture (the “Indenture”). The  
9 Indenture secures on a *pro rata, pari passu* basis all of the indebtedness  
10 owed by Big Rivers to its existing senior secured creditors as well as future  
11 senior secured creditors. A principal feature of the Indenture is the use  
12 of a lien and security interest in favor of an institutional trustee rather  
13 than in favor of each individual creditor as mortgagee. The Indenture  
14 creates a lien and security interest on most of Big Rivers’ real and  
15 personal property.

16 Additional debt obligations can be secured under the Indenture on  
17 a *pari passu* basis with Big Rivers’ existing senior secured creditors  
18 without obtaining the existing senior secured creditors’ approvals,  
19 provided such debt obligations meet certain objective tests.

20 The Indenture, dated July 1, 2009, was made by and between Big  
21 Rivers Electric Corporation, as Grantor, and U.S. Bank National

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

1 Association, as Trustee. As of July 31, 2022, the Indenture secured the  
2 following Obligations:

- 3 • RUS 2009 Promissory Note Series B, dated July 16, 2009, made by  
4 the Company to the United States of America, in the amount at final  
5 maturity of \$245,530,257, maturing on December 31, 2023. This is  
6 an Existing Obligation under the Indenture.
- 7 • Big Rivers Electric Corporation First Mortgage Note, Series 2012A,  
8 dated July 24, 2012, made by the Company to CoBank, ACB, in the  
9 original principal amount of \$235,000,000, maturing on June 30,  
10 2032. This is an Additional Obligation under the Indenture.
- 11 • Big Rivers Electric Corporation First Mortgage Note, Series 2012B,  
12 dated July 27, 2012, made by the Company to National Rural  
13 Utilities Cooperative Finance Corporation, in the original principal  
14 amount of \$302,000,000, maturing on May 31, 2032. This is an  
15 Additional Obligation under the Indenture.
- 16 • Big Rivers Electric Corporation First Mortgage Notes, RUS 2018 W8  
17 FFB Loan, dated January 02, 2018, made by the Company through  
18 the United States of America to the Federal Financing Bank, in the  
19 original aggregate principal amount of \$25,630,000, maturing on  
20 January 3, 2033. This is an Existing Obligation under the Indenture.



**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

- 1           •    Big Rivers Electric Corporation First Mortgage Notes, RUS 2018 X8  
2                    FFB Loan, dated January 02, 2018, made by the Company through  
3                    the United States of America to the Federal Financing Bank, in the  
4                    original aggregate principal amount of \$17,965,000, maturing on  
5                    December 31, 2043. This is an Existing Obligation under the  
6                    Indenture.
- 7           •    Big Rivers Electric Corporation First Mortgage Notes, Series 2020A,  
8                    dated June 11, 2020, made by the Company to National Rural  
9                    Utilities Cooperative Finance Corporation, Regions Bank, KeyBank  
10                  National Association, Fifth Third Bank, Bank of America, and  
11                  CoBank, ACB (collectively, the “Lenders”) in the aggregate principal  
12                  amount of \$150,000,000 to secure the loans made by the Lenders to  
13                  Big Rivers under the Senior Secured Credit Agreement, originally  
14                  maturing on June 11, 2023. In 2021, Big Rivers was granted the first  
15                  of two optional one-year extensions, resulting in a maturity date of  
16                  June 7, 2024. This is an Additional Obligation under the Indenture.
- 17          •    Big Rivers Electric Corporation First Mortgage Note, Series 2020B,  
18                  dated December 23, 2020, made by the Company to National Rural  
19                  Utilities Cooperative Finance Corporation, in the original principal  
20                  amount of \$83,300,000, maturing on February 28, 2031. This is an  
21                  Additional Obligation under the Indenture.

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

- 1           • Big Rivers Electric Corporation First Mortgage Notes, Series 2022A,  
2           dated April 22, 2022, made by the Company to National Rural  
3           Utilities Cooperative Finance Corporation, in the original principal  
4           amount of \$150,000,000, maturing on September 30, 2042. This is an  
5           Additional Obligation under the Indenture.
- 6           • Big Rivers Electric Corporation First Mortgage Notes, RUS FFB  
7           Loans, dated October 6, 2021, made by the Company through the  
8           United States of America to the Federal Financing Bank, in the  
9           original aggregate principal amounts of \$24,550,000 (Y8 A Note),  
10          \$122,765,000 (Y8 B Note), \$39,050,000 (Z8 Note) and \$59,400,000  
11          (AA8 Note), each with a final maturity date of December 31, 2043.  
12          This is an Additional Obligation under the Indenture.
- 13          The Indenture provides that a maximum of \$3,000,000,000 of  
14          Additional Obligations may be issued and secured. As noted above, the  
15          Big Rivers Electric Corporation First Mortgage Notes, Series 2012A,  
16          2012B, 2020A, 2020B, 2022A, and the RUS 2018 W8, 2018 X8, 2021 Y8 A  
17          and B, 2021 Z8, and 2021 AA8 FFB Loans are Additional Obligations  
18          under the Indenture.
- 19          e. No bonds have been authorized.
- 20          f. As of July 31, 2022, Big Rivers' notes outstanding consisted of the RUS  
21          2009 Promissory Note Series B ("RUS 2009 Series B Note"); Big Rivers

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

1 Electric Corporation First Mortgage Notes, Series 2012A, Series 2012B,  
2 Series 2020A, Series 2020B, Series 2022A; and the following RUS FFB  
3 Loans: 2018 W8, 2018 X8, 2021 Y8 A, 2021 Y8B, and 2021 AA8.

4 The RUS 2009 Series B Note, dated July 16, 2009, was issued in  
5 favor of the United States of America, acting through the United States  
6 Department of Agriculture, Rural Utilities Services, (the “RUS”), in the  
7 original principal amount of \$245,530,257, with a maturity date of  
8 December 31, 2023. The RUS 2009 Series B Note has no stated interest  
9 rate and an outstanding stated principal balance of \$122,765,257 as of  
10 July 31, 2022. No interest amount is paid on this note.

11 Big Rivers Electric Corporation First Mortgage Note, Series 2012A,  
12 dated July 24, 2012, was issued in favor of CoBank, ACB, in the original  
13 principal amount of \$235,000,000, with a maturity date of June 30, 2032.  
14 The First Mortgage Note, Series 2012A, has a fixed interest rate of 4.30%  
15 and an outstanding principal balance of \$144,737,619 as of July 31, 2022.  
16 The interest paid on the First Mortgage Note, Series 2012A during the  
17 fiscal year ending December 31, 2021, was \$6,849,107.

18 Big Rivers Electric Corporation First Mortgage Note, Series 2012B,  
19 dated July 27, 2012, was issued in favor of National Rural Utilities  
20 Cooperative Finance Corporation, in the original principal amount of  
21 \$302,000,000, with a maturity date of May 31, 2032. The First Mortgage

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

1 Note, Series 2012B, bears serial interest rate pricing, with interest rates  
2 ranging from 3.05% to 5.35%, and had an outstanding principal balance  
3 of \$180,408,054 as of July 31, 2022. The interest paid on the First  
4 Mortgage Notes, Series 2012B during the fiscal year ending December 31,  
5 2021, was \$9,080,837.

6 Big Rivers Electric Corporation First Mortgage Note, RUS 2018 W8  
7 FFB Loan, dated January 02, 2018, was issued in favor of the Federal  
8 Financing Bank and administered through the Rural Utilities Service, in  
9 the original principal amount of \$25,630,000, with a maturity date of  
10 January 3, 2033. The First Mortgage Note, RUS 2018 W8 FFB Loan, has  
11 a fixed stated interest rate of 2.703% with an effective interest rate of  
12 2.828% and had an outstanding principal balance of \$21,034,198 as of  
13 July 31, 2022. The interest paid on the First Mortgage Notes, RUS 2018  
14 W8 FFB Loan, during the fiscal year ending December 31, 2021, was  
15 \$489,915.

16 Big Rivers Electric Corporation First Mortgage Note, RUS 2018 X8  
17 FFB Loan, dated January 2, 2018, was issued in favor of the Federal  
18 Financing Bank and administered through the Rural Utilities Service, in  
19 the original principal amount of \$17,965,000, with a maturity date of  
20 January 3, 2033. The First Mortgage Note, RUS 2018 W8 FFB Loan, has  
21 a fixed stated interest rate of 2.810% with an effective interest rate of

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

1           2.935% and had an outstanding principal balance of \$16,484,504 as of  
2           July 31, 2022. The interest paid on the First Mortgage Notes, RUS 2018  
3           X8 FFB Loan, during the fiscal year ending December 31, 2021, was  
4           \$376,932.

5           Big Rivers Electric Corporation First Mortgage Notes, Series  
6           2020A, dated June 11, 2020, were issued in connection with the 2020  
7           Senior Secured Credit Agreement, dated June 11, 2020, (“2020 Credit  
8           Agreement”) in favor of National Rural Utilities Cooperative Finance  
9           Corporation, Regions Bank, KeyBank National Association, Fifth Third  
10          Bank, Bank of America, and CoBank, ACB, in the aggregate principal  
11          amount of \$150,000,000, with an original maturity date of June 11, 2023  
12          and extended maturity date of June 7, 2024. The interest rate applicable  
13          to loans under the 2020 Credit Agreement are determined based on the  
14          type of loan selected (i.e. LIBO Loan or Alternate Base Rate (ABR) Loan).  
15          For LIBO Loans, the applicable interest rate is equal to the LIBOR Rate  
16          for such Interest Period plus the LIBO Applicable Margin, based on the  
17          Secured Credit Rating of Big Rivers per the terms of the credit agreement.  
18          For ABR loans, the applicable interest rate is equal to the Alternate Base  
19          Rate plus the ABR Applicable Margin, as defined in the credit agreement.  
20          As of July 31, 2022, there was no outstanding principal balance. The

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

1 interest paid on the Series 2020A Notes during the fiscal year ending  
2 December 31, 2021 was \$249,283.

3 Big Rivers Electric Corporation First Mortgage Note, Series 2020B,  
4 dated December 23, 2020, was issued in favor of National Rural Utilities  
5 Cooperative Finance Corporation, in the original principal amount of  
6 \$83,300,000, with a maturity date and principal payment date of  
7 February 28, 2031. The First Mortgage Note, Series 2020B, has a fixed  
8 interest rate of 2.49%, and had an outstanding principal balance of  
9 \$83,300,000 as of July 31, 2022. The interest paid on the First Mortgage  
10 Notes, Series 2020B during the fiscal year ending December 31, 2021, was  
11 \$2,125,314.

12 Big Rivers Electric Corporation First Mortgage Note, Series 2022A,  
13 dated April 22, 2022, was issued in favor of National Rural Utilities  
14 Cooperative Finance Corporation, in the original principal amount of  
15 \$150,000,000, with a maturity date of September 30, 2042. The First  
16 Mortgage Note, Series 2022A, consists of three \$50,000,000 draws at fixed  
17 stated interest rates of 4.580%, 4.820%, and 4.374% and had an  
18 outstanding balance of \$150,000,000 as of July 31, 2022. The interest  
19 paid on the First Mortgage Note, Series 2022A, during the fiscal year  
20 ending December 31, 2021, was \$0.

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

1                   Big Rivers Electric Corporation First Mortgage Note, RUS 2021 Y8  
2                   A FFB Loan, dated October 6, 2021, was issued in favor of the Federal  
3                   Financing Bank and administered through the Rural Utilities Service, in  
4                   the original principal amount of \$24,542,000, with a maturity date of  
5                   December 31, 2043. The First Mortgage Note, RUS 2021 Y8 A FFB Loan,  
6                   has a fixed stated interest rate of 1.811% with an effective interest rate of  
7                   1.936% and had an outstanding principal balance of \$24,542,000 as of  
8                   July 31, 2022. The interest paid on the First Mortgage Notes, RUS 2021  
9                   Y8 A FFB Loan, during the fiscal year ending December 31, 2021, was \$0.

10                   Big Rivers Electric Corporation First Mortgage Note, RUS 2021 Y8  
11                   B FFB Loan, dated October 6, 2021, was issued in favor of the Federal  
12                   Financing Bank and administered through the Rural Utilities Service, in  
13                   the original principal amount of \$122,765,000, with a maturity date of  
14                   December 31, 2043. The First Mortgage Note, RUS 2021 Y8 B FFB Loan,  
15                   has a fixed stated interest rate of 3.217% with an effective interest rate of  
16                   3.342% and had an outstanding principal balance of \$122,765,000 as of  
17                   July 31, 2022. The interest paid on the First Mortgage Notes, RUS 2021  
18                   Y8 B FFB Loan, during the fiscal year ending December 31, 2021, was \$0.

19                   Big Rivers Electric Corporation First Mortgage Note, RUS 2021  
20                   AA8 FFB Loan, dated October 6, 2021, was issued in favor of the Federal  
21                   Financing Bank and administered through the Rural Utilities Service, in

**Big Rivers Electric Corporation**  
**Financial Exhibit**  
**As of July 31, 2022**

1           the original principal amount of \$57,500,000, with a maturity date of  
2           December 31, 2043. The First Mortgage Note, RUS 2021 AA8 FFB Loan,  
3           has a fixed stated interest rate of 2.187% with an effective interest rate of  
4           2.312% and had an outstanding principal balance of \$57,500,000 as of  
5           July 31, 2022. The interest paid on the First Mortgage Notes, RUS 2021  
6           AA8 FFB Loan, during the fiscal year ending December 31, 2021, was \$0.

7       g.   The Company has no other indebtedness.

8       h.   No dividends have been paid.

9       i.   Big Rivers Electric Corporation's statement of operations and balance  
10       sheet for the twelve months ending July 31, 2022, are attached hereto.



**BIG RIVERS ELECTRIC CORPORATION**

**FINANCIAL AND OPERATING REPORT SUMMARY**

**12 MONTHS ENDING JULY 31, 2022**

**ELECTRICAL POWER SUPPLY**

**FROM RUS FORM 12 PART A - FINANCIAL**

**SECTION A. STATEMENT OF OPERATIONS**

	ITEM	12 Months Ending 7/31/2022
1	Electric Energy Revenues	\$ 428,935,240.56
2	Income From Leased Property (Net)	\$ -
3	Other Operating Revenue and Income	\$ 26,097,752.22
<b>4</b>	<b>TOTAL Oper. Revenues &amp; Patronage Capital (1 thru 3)</b>	<b>\$ 455,032,992.78</b>
5	Operating Expense - Production - Excluding Fuel	\$ 44,809,200.72
6	Operating Expense - Production - Fuel	\$ 150,355,465.23
7	Operating Expense - Other Power Supply	\$ 71,628,948.86
8	Operating Expense - Transmission	\$ 6,371,760.21
9	Operating Expense - RTO/ISO	\$ 1,001,457.55
10	Operating Expense - Distribution	\$ -
11	Operating Expense - Customer Accounts	\$ -
12	Operating Expense - Customer Service & Information	\$ 460,420.51
13	Operating Expense - Sales	\$ 123,178.61
14	Operating Expense - Administrative & General	\$ 26,897,190.51
<b>15</b>	<b>TOTAL Operation Expense (5 thru 14)</b>	<b>\$ 301,647,622.20</b>
16	Maintenance Expense - Production	\$ 25,049,224.41
17	Maintenance Expense - Transmission	\$ 6,895,738.17
18	Maintenance Expense - RTO/ISO	\$ -
19	Maintenance Expense - Distribution	\$ -
20	Maintenance Expense - General Plant	\$ 185,012.49
<b>21</b>	<b>TOTAL Maintenance Expense (16 thru 20)</b>	<b>\$ 32,129,975.07</b>
22	Depreciation and Amortization Expense	\$ 84,769,512.94
23	Taxes	\$ 451.00
24	Interest on Long-Term Debt	\$ 34,304,731.52
25	Interest Charged to Construction - Credit	\$ (5,228,151.00)
26	Other Interest Expense	\$ 739,106.25
27	Asset Retirement Obligations	\$ -
28	Other Deductions	\$ 574,803.54
<b>29</b>	<b>TOTAL Cost of Electric Service (15 + 21 thru 28)</b>	<b>\$ 448,938,051.52</b>
<b>30</b>	<b>Operating Margins (4 less 29)</b>	<b>\$ 6,094,941.26</b>
31	Interest Income	\$ 687,760.94
32	Allowance For Funds Used During Construction	\$ -
33	Income (Loss) from Equity Investments	\$ -
34	Other Non-operating Income (Net)	\$ 718,477.75
35	Generation & Transmission Capital Credits	\$ -
36	Other Capital Credits and Patronage Dividends	\$ 2,240,196.92
37	Extraordinary Items	\$ -
<b>38</b>	<b>Net Patronage Capital or Margins (30 thru 37)</b>	<b>\$ 9,741,376.87</b>

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE  <b>FINANCIAL AND OPERATING REPORT          ELECTRIC POWER SUPPLY          PART A - FINANCIAL</b>	BORROWER DESIGNATION KY0062
	PERIOD ENDED Jul-22
INSTRUCTIONS - See help in the online application.	

**SECTION B. BALANCE SHEET**

ASSETS AND OTHER DEBITS		LIABILITIES AND OTHER CREDITS	
1. Total Utility Plant in Service	1,762,665,509.47	33. Memberships	75.00
2. Construction Work in Progress	208,565,778.85	34. Patronage Capital a. Assigned and Assignable b. Retired This year c. Retired Prior years <b>d. Net Patronage Capital (a-b-c)</b>	0.00
3. <b>Total Utility Plant (1 + 2)</b>	<b>1,971,231,288.32</b>		
4. Accum. Provision for Depreciation and Amort.	1,075,869,139.42		
5. <b>Net Utility Plant (3 - 4)</b>	<b>895,362,148.90</b>		
6. Non-Utility Property (Net)	0.00	35. Operating Margins - Prior Years	<214,828,129.31>
7. Investments in Subsidiary Companies	0.00	36. Operating Margin - Current Year	34,395,870.86
8. Invest. in Assoc. Org. - Patronage Capital	13,364,362.87	37. Non-Operating Margins	669,021,965.96
9. Invest. in Assoc. Org. - Other - General Funds	684,993.00	38. Other Margins and Equities	6,679,406.20
10. Invest. in Assoc. Org. - Other - Nongeneral Funds	0.00	39. <b>Total Margins &amp; Equities (33 + 34d thru 38)</b>	<b>495,269,188.71</b>
11. Investments in Economic Development Projects	10,000.00	40. Long-Term Debt - RUS (Net)	98,628,605.82
12. Other Investments	5,333.85	41. Long-Term Debt - FFB - RUS Guaranteed	240,002,028.99
13. Special Funds	4,877,136.53	42. Long-Term Debt - Other - RUS Guaranteed	0.00
14. <b>Total Other Property And Investments (6 thru 13)</b>	<b>18,941,826.25</b>	43. Long-Term Debt - Other (Net)	527,852,218.39
15. Cash - General Funds	36,240,882.49	44. Long-Term Debt - RUS - Econ. Devel. (Net)	0.00
16. Cash - Construction Funds - Trustee	0.00	45. Payments - Unapplied	0.00
17. Special Deposits	3,131,051.64	46. <b>Total Long-Term Debt (40 thru 44-45)</b>	<b>866,482,853.20</b>
18. Temporary Investments	83,086,947.02	47. Obligations Under Capital Leases - Noncurrent	0.00
19. Notes Receivable (Net)	0.00	48. Accumulated Operating Provisions and Asset Retirement Obligations	87,762,889.41
20. Accounts Receivable - Sales of Energy (Net)	55,569,882.02	49. <b>Total Other NonCurrent Liabilities (47 +48)</b>	<b>87,762,889.41</b>
21. Accounts Receivable - Other (Net)	7,528,471.42	50. Notes Payable	0.00
22. Fuel Stock	24,112,042.95	51. Accounts Payable	53,544,042.03
23. Renewable Energy Credits	0.00	52. Current Maturities Long-Term Debt	32,917,127.33
24. Materials and Supplies - Other	15,850,902.40	53. Current Maturities Long-Term Debt - Rural Development	0.00
25. Prepayments	4,062,699.91	54. Current Maturities Capital Leases	0.00
26. Other Current and Accrued Assets	17,103.33	55. Taxes Accrued	2,225,138.42
27. <b>Total Current And Accrued Assets (15 thru 26)</b>	<b>229,599,983.18</b>	56. Interest Accrued	4,277,220.26
28. Unamortized Debt Discount & Extraor. Prop. Losses	3,064,727.60	57. Other Current and Accrued Liabilities	17,114,248.47
29. Regulatory Assets	417,330,757.48	58. <b>Total Current &amp; Accrued Liabilities (50 thru 57)</b>	<b>110,077,776.51</b>
30. Other Deferred Debits	13,179,915.17	59. Deferred Credits	17,886,650.75
31. Accumulated Deferred Income Taxes	0.00	60. Accumulated Deferred Income Taxes	0.00
32. <b>Total Assets And Other Debits (5+14+27 thru 31)</b>	<b>1,577,479,358.58</b>	61. <b>Total Liabilities and Other Credits (39 + 46 + 49 + 58 thru 60)</b>	<b>1,577,479,358.58</b>

RUS Financial and Operating Report Electric Power Supply Part A - Financial

Revision Date 2013