

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF BIG RIVERS)
ELECTRIC CORPORATION FOR APPROVAL OF) CASE NO. 2020-00183
SOLAR POWER CONTRACTS)

**ATTORNEY GENERAL’S SECOND REQUEST FOR INFORMATION TO
BIG RIVERS ELECTRIC CORPORATION**

Comes now the intervenor, the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention (“Attorney General”), and submits his Second Request for Information to Big Rivers Electric Corporation (hereinafter “BREC” or the “Company”) to be answered by September 10, 2020, and in accord with the following:

- (1) In each case where a request seeks data provided in response to a staff request, reference to the appropriate requested item will be deemed a satisfactory response.
- (2) Identify the witness who will be prepared to answer questions concerning each request.
- (3) Repeat the question to which each response is intended to refer.
- (4) These requests shall be deemed continuing so as to require further and supplemental responses if the company receives or generates additional information within the scope of these requests between the time of the response and the time of any hearing conducted hereon.
- (5) Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity that

the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

(6) If you believe any request appears confusing, please request clarification directly from undersigned Counsel for the Office of Attorney General.

(7) To the extent that the specific document, workpaper or information as requested does not exist, but a similar document, workpaper or information does exist, provide the similar document, workpaper, or information.

(8) To the extent that any request may be answered by way of a computer printout, please identify each variable contained in the printout, which would not be self-evident to a person not familiar with the printout.

(9) If the company has objections to any request on the grounds that the requested information is proprietary in nature, or for any other reason, notify the Office of the Attorney General as soon as possible, and in accordance with Commission direction.

(10) As used herein, the words "document" or "documents" are to be construed broadly and shall mean the original of the same (and all non-identical copies or drafts thereof) and if the original is not available, the best copy available. These terms shall include all information recorded in any written, graphic or other tangible form and shall include, without limiting the generality of the foregoing, all reports; memoranda; books or notebooks; written or recorded statements, interviews, affidavits and depositions; all letters or correspondence; telegrams, cables and telex messages; contracts, leases, insurance policies or other agreements; warnings and caution/hazard notices or labels; mechanical and electronic recordings and all information so stored, or transcripts of such recordings; calendars, appointment books, schedules, agendas and diary entries; notes or memoranda

of conversations (telephonic or otherwise), meetings or conferences; legal pleadings and transcripts of legal proceedings; maps, models, charts, diagrams, graphs and other demonstrative materials; financial statements, annual reports, balance sheets and other accounting records; quotations or offers; bulletins, newsletters, pamphlets, brochures and all other similar publications; summaries or compilations of data; deeds, titles, or other instruments of ownership; blueprints and specifications; manuals, guidelines, regulations, procedures, policies and instructional materials of any type; photographs or pictures, film, microfilm and microfiche; videotapes; articles; announcements and notices of any type; surveys, studies, evaluations, tests and all research and development (R&D) materials; newspaper clippings and press releases; time cards, employee schedules or rosters, and other payroll records; cancelled checks, invoices, bills and receipts; and writings of any kind and all other tangible things upon which any handwriting, typing, printing, drawings, representations, graphic matter, magnetic or electrical impulses, or other forms of communication are recorded or produced, including audio and video recordings, computer stored information (whether or not in printout form), computer-readable media or other electronically maintained or transmitted information regardless of the media or format in which they are stored, and all other rough drafts, revised drafts (including all handwritten notes or other marks on the same) and copies of documents as hereinbefore defined by whatever means made.

(11) For any document withheld on the basis of privilege, state the following: date; author; addressee; indicated or blind copies; all persons to whom distributed, shown, or explained; and, the nature and legal basis for the privilege asserted.

(12) In the event any document called for has been destroyed or transferred beyond the

control of the company, please state: the identity of the person by whom it was destroyed or transferred, and the person authorizing the destruction or transfer; the time, place, and method of destruction or transfer; and, the reason(s) for its destruction or transfer. If destroyed or disposed of by operation of a retention policy, state the retention policy.

(13) Provide written responses, together with any and all exhibits pertaining thereto, in one or more bound volumes, separately indexed and tabbed by each response, in compliance with Kentucky Public Service Commission Regulations.

(14) “And” and “or” should be considered to be both conjunctive and disjunctive, unless specifically stated otherwise.

(15) “Each” and “any” should be considered to be both singular and plural, unless specifically stated otherwise.

Respectfully submitted,

DANIEL J. CAMERON
ATTORNEY GENERAL



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Certificate of Service and Filing

Pursuant to the Commission's Orders dated March 16, 2020 and March 24, 2020, in Case No. 2020-00085, and in accord with all other applicable law, Counsel certifies that an electronic copy of the foregoing was served by e-mail to the following. A physical copy of the filing will be submitted to the Commission once the State of Emergency has ceased.

Tyson Kamuf
Tyson.Kamuf@bigrivers.com

This 28th day of August, 2020.

Angela M. Aoad

Assistant Attorney General

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1. Reference the news article that Argus Media published on April 28, 2020, at the below link. The article states that Nucor Corporation (“Nucor”) is delaying investments in two mills in Kentucky because of uncertainty in the steel market surrounding impacts of the Covid-19 pandemic. Specifically, the article states that Nucor will delay some investments in its new state of the art steel plate mill in Brandenburg, Kentucky.
<https://www.argusmedia.com/en/news/2100575-nucor-to-delay-kentucky-investments-update>
 - a. Provide a detailed update as to whether Nucor is still delaying investment in the two mills in Kentucky due to the Covid-19 pandemic.
 - b. Specifically, explain what is meant by “some investments” in the Brandenburg mill will be delayed.
 - c. If Nucor is still delaying investment, provide an updated timeline for the proposed Nucor mill project.
 - d. Explain in detail whether there are safeguards in the electric service agreement with Nucor that protect BREC and Meade County Rural Electric Cooperative Corporation’s (“RECC”) customers from paying for any costs associated with Nucor potentially delaying investment in the Brandenburg mill.
2. Refer to BREC’s response to the Attorney General’s First Request for Information (“Attorney General’s First Request”), Item 1(e), in which BREC asserts that it has 120 kW of solar demonstration/education projects spread across seven sites. Four are located at BREC’s Member offices, plus one each at a middle school, a high school, and a public

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park. BREC further states that there is another 2,613 kW owned by individual retail members of BREC's member-owners spread across 190 sites.

- a. Explain whether the costs associated with the 120 kW solar demonstrations/education projects are paid for by the customers in the base rates. If not, explain who pays for the costs.
 - b. Explain in detail who owns the 2,613 kW of solar energy spread across 190 sites.
 - c. Generally explain how the location of the 190 sites was decided upon, or alternatively, whether the 2,613 kW of solar capacity is privately owned.
 - d. Explain whether the costs associated with the additional 2,613 kW of solar energy are paid for by the customers in base rates. If not, explain who pays for the costs.
 - e. Explain how many of the owners of the additional 2,613 kW of solar energy are net metering customers, and provide the monetary amounts paid to the customers for the solar energy. Identify also the tariff sheet(s) setting forth BREC's net metering rates.
3. Refer to BREC's response to the Attorney General's First Request, Item 2(b), in which BREC asserts that the entire benefit of the solar contracts will flow to the member-owners, either through the Fuel Adjustment Clause or the margin-sharing mechanism recently approved in Case No. 2020-00064.
- a. Based upon the above-referenced response, is BREC unsure which mechanism the benefits will flow through to the member-owners?
 - b. Explain in detail, which mechanism the entire benefit of the solar contracts will flow through to the member-owners.

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4. Refer to BREC's response to the Attorney General's First Request, Item 2(c), in which BREC states that it would be entering into solar agreements even without the Nucor contract, but the timing would be different. Explain in detail why BREC states that the timing would be different.
5. Refer to BREC's response to the Attorney General's First Request, Item 5, in which it states that there are 22 National Renewables Cooperative Organization ("NRCO") members, and BREC's annual dues are \$33,800. Explain whether the other NRCO members pay the same monetary amount of annual dues that BREC does, and if not, explain why not.
6. Refer to BREC's response to the Attorney General's First Request, Item 9. BREC asserts that the economic analysis of BREC building and operating a 100 MW solar facility indicates that it would not be profitable, and not competitive with the other resource options. Explain why BREC would not be able to build and operate a solar facility that would be a least cost resource, but Henderson Solar, LLC ("Henderson Solar Facility"), Meade County Solar, LLC ("Meade Solar Facility"), and McCracken County Solar, LLC ("McCracken Solar Facility") can build and operate profitable solar facilities while providing a least cost resource.
7. Refer to BREC's response to the Attorney General's First Request, Item 10(a).
 - a. What percentage of BREC's total annual energy production will the 260 MW of solar energy represent?
 - b. What percentage of BREC's total annual energy production will energy associated with natural gas represent?

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- c. What percentage of BREC's total annual energy production will energy associated with coal represent?
 - d. What percentage of BREC's total annual energy production will energy associated with wind represent?
 - e. What percentage of BREC's total annual energy production will energy associated with hydroelectric power represent?
 - f. Provide any and all remaining types of energy production not aforementioned, along with the percentage of BREC's total annual energy production that the energy represents.
8. Refer to BREC's response to the Attorney General's First Request, Item 10(b).
 - a. Explain in detail why the MWh production at the solar sites will degrade annually.
 - b. State what the electrical output of each solar facility will be by year 20.
 9. Refer to BREC's response to the Attorney General's First Request, Item 10(c). The answer provided was nonresponsive. As originally requested, explain what ancillary services BREC will receive under the solar contracts.
 10. Refer to BREC's response to the Attorney General's First Request, Item 10(e).
 - a. BREC cites to an April 2, 2019 New York Times article that discusses carbon pricing efforts unfolding at the state level, including Northeastern states, California, and potentially Virginia and New Jersey. Explain whether there are carbon pricing efforts in the state of Kentucky.

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- b. Explain why carbon credits were not included in BREC's base economic analysis of the solar contracts, but BREC did include carbon credits in some of the scenario analysis.
 - c. Identify which scenario analyses included carbon credits.
11. Refer to BREC's responses to the Attorney General's First Request, Items 12(i), 13(j), and 14(i). Explain in detail why BREC will be paying for the Henderson Solar Facility's property taxes through the contracted rates, but will not be paying for the Meade Solar Facility or McCracken Solar Facility's property taxes through rates.
12. Refer to BREC's response to the Attorney General's First Request, Item 16. BREC contends that it will sell the renewable energy certificates ("RECs") and pass the proceeds through to its members. BREC further states that if a member wants solar energy, then that member would be required to purchase the RECs at market prices and other members will still receive that benefit. Fully explain in detail the entire process of obtaining and selling the RECs, as well as how the proceeds will flow to the members.
13. Refer to BREC's response to the Attorney General's First Request, Item 17, in which BREC asserts that "[t]he model results show the maximum allowed solar PPA amount is added in all the sensitivities except when power prices (LMP Prices) are higher and natural gas delivered prices are lower."
- a. Provide clarification of the above-referenced sentence.
 - b. Explain what percentage of the time the modeling showed that the solar contracts were the least cost resource.

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- c. Explain why the solar purchase power agreement amount is not added in the sensitivities when power prices are higher.
 - d. Identify what BREC deems as higher power prices.
 - e. Explain why the solar purchase power agreement amount is not added in the sensitivities when natural gas delivered prices are lower.
 - f. Identify what BREC deems as lower natural gas prices.
14. Refer to BREC's response to the Attorney General's First Request, Item 21, in which BREC asserts that the solar contracts contain guaranteed minimums at 90% of expected generation over two years.
- a. Explain in detail what happens if the solar contracts do not produce a minimum of 90% of expected generation over two years.
 - b. Is BREC referring to the initial two years of the contract?
 - c. Why are there only guaranteed minimums for two years, instead of for the full 20-year contract term?
15. Refer to BREC's response to the Attorney General's First Request, Item 28(a). BREC asserts that the estimated cost for each 69 kV connection is \$300,000. Confirm that under the contract terms it appears BREC will be responsible to pay for all 69 kV connection costs.
16. Refer to BREC's response to the Attorney General's First Request, Item 28(b). Will there be any interconnection costs below \$300,000 that Community Energy, Inc. will be responsible for in the Meade and McCracken solar contracts?

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17. Refer to BREC's response to the Attorney General's First Request, Item 38. Explain in detail how retaining RECs under all three solar contracts is advantageous to BREC's member-owners.
18. Refer to BREC's response to the Attorney General's First Request, Item 42. BREC avers that the solar contracts will cause BREC to incur MISO market fees for administrative and other minor changes. Explain why entering into the solar contracts will cause MISO to charge additional fees.
19. Refer to BREC's response to the Commission Staff's First Request for Information ("Commission Staff's First Request"), Item 18, wherein BREC states that issues could arise if MISO is saturated with high levels of renewable generation of 50% or higher. BREC further contends that currently, the renewable generation on the MISO system in BREC's Zone is not anywhere close to high levels of renewable generation.
 - a. Explain what issues could arise if renewables penetration in MISO reaches the levels of 30%, 40% and 50% or higher. Include in your response a discussion of:
 - (i) what, if any measures or system enhancements MISO may have to initiate to reduce the risk of load interruptions, curtailments, load shedding or rolling blackouts, based on the assumptions of a renewables penetration at 30%, 40%, or 50% or higher; and
 - (ii) the potential roles that dynamic support capabilities, synchronous condensers, and HVDC lines could play, if applicable.
 - b. Provide the current percentage of renewable generation in the MISO system.
20. Refer to the Application generally. If BREC relies on the delivery of solar power under the solar contracts is BREC putting its members at risk for load interruptions, curtailments,

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load shedding or rolling blackouts as is currently the case in California where renewable energy is unable to meet demand? Please explain in detail how this would or would not be the case.

21. Reference the Direct Testimony of Mark Eacret, page 28, wherein he references utilizing Plexos 8.2 R01, which he states is BREC's in-house production cost model. Reference also BREC's response to Commission Staff's First Request, Item 31. Explain whether this is the same cost model that BREC uses for IRP purposes. Identify all other models BREC utilizes for IRP purposes.
22. Reference the response to Commission Staff's First Request, Item 32. If the Commission should approve the instant application, explain whether such a ruling could in any manner influence the credit rating agencies' decisions regarding whether to upgrade BREC to an investment grade rating, and if so, how.